AMERICA'S ROLE IN THE WORLD COAL EXPORT MARKET

(DOMESTIC COAL TRANSPORTATION)

HEARING

BEFORE THE

SUBCOMMITTEE ON
ENERGY AND MINERAL RESOURCES

OF THE

COMMITTEE ON
ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE

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FIRST SESSION

ON THE

DOMESTIC COAL TRANSPORTATION
TO EXPORT TERMINALS

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AMERICA'S ROLE IN THE WORLD COAL MARKET: DOMESTIC COAL TRANSPORTATION TO EXPORT TERMINALS

THURSDAY, DECEMBER 3, 1981

U.S. SENATE,
SUBCOMMITTEE ON ENERGY AND MINERAL RESOURCES,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Washington, D.C.

The subcommittee met, pursuant to notice, at 9:30 a.m., in room 3110, Dirksen Office Building, Hon. John W. Warner presiding.

Present: Senators Warner, Johnston, Ford, and Bradley.

Also present: Roger Sindelar, counsel; D. Michael Harvery, chief counsel for the minority; and Ron Andes, congressional fellow.

OPENING STATEMENT OF HON. JOHN W. WARNER, A U.S. SENATOR FROM THE STATE OF VIRGINIA

Senator WARNER. I want to welcome you to the third in a series of hearings on America's role in the coal export market.

In hearings already held before this subcommittee we have heard abundant testimony that America has a major role to play in this market if its coal remains cost competitive with exported coals from other nations.

Foreign purchasers of our Nation's coal have stated that one of the major components of the price of American coal is the transportation cost of the coal from this country's mines to foreign markets.

The transportation of America's coal for the export market can be separated for the purpose of examination into two separate, distinct segments—the domestic coal transportation network and the international coal transportation network with a common link being our Nation's ports.

Today we will examine the domestic network segment with a later hearing to be held on the condition of America's coal ports and the international movement of coal.

Our domestic coal movement is broken down into approximately four components—railroads, inland waterways, highways, and slurry.

Each component is vital in the struggle to keep America's coal cost-competitive.

All of the domestic transportation components face major problems and obstacles in their effort to maintain the competitiveness of U.S. coal. Therefore, it is essential that industry and Government work together, with industry taking the major lead, on initiatives to solve these problems and keep transportation costs down.

Recently Congress has passed legislation to assist the transportation industry through railroad deregulation and major tax legislation. Currently, Congress has before it other transportation legislation initiatives related to coal—coal haul roads, port improvements and inland waterways to name a few.

Congress has some very difficult transportation questions and issues to grapple with on these bills and other matters. It is hoped that this hearing will provide guidance on these issues.

I would like to reiterate, though, that I believe it is incumbent on industry to work in a cooperative manner to resolve its own transportation problems, whenever and wherever possible, and it is my intention as chairman of this subcommittee to work with other Members of the Senate on matters to facilitate the competitiveness of U.S. coal for exports.

Our first witness this morning because of a conflict will be Brig. Gen. Forrest T. Gay, Deputy Director of Civil Works, U.S. Corps of Engineers. We welcome you this morning.

General GAY. Mr. Chairman, I appreciate your indulgence in taking me first so that I can be excused for an earlier commitment.

I brought with me to assist in answering questions after my testimony Alex Shwaiko to my right, Chief of our Office of Policy, and his expert on foreign policy, DuWayne Koch.

STATEMENT OF BRIG. GEN. FORREST T. GAY III, DEPUTY DIRECTOR OF CIVIL WORKS OFFICE, CHIEF OF ENGINEERS, DEPARTMENT OF THE ARMY, ACCOMPANIED BY ALEX SHWAIKO, CHIEF, OFFICE OF POLICY, AND DuWAYNE KOCH, TRANSPORTATION SPECIALIST

General GAY. I am pleased to appear before your committee to discuss with you the overall condition of America's inland waterway system and an assessment of what needs to be done to overcome obstacles existing within the system and to maximize the system's use for the movement of coal and other bulk commodities.

The Interagency Coal Export Task Force in January 1981 projected U.S. steam coal exports to be about 200 million tons for the year 2000. This export market for steam coal 5 years ago was virtually nonexistent. Transportation of coal to domestic powerplants and to coastal ports for export is projected to be the most rapidly growing use of our inland navigation system.

Information from our National Waterway Study has indicated that coal movement are expected to be the leading commodity for all the domestic movements in the future by more than doubling to 480 million tons by the end of this century. The NWS projections show that the most rapidly growing areas of future waterborne commerce are those reaches of the Mississippi River and tributaries and the gulf region which are dominated by coal movement such as the Ohio River and tributaries, the Tennessee River, the Mobile River and tributaries, the Illinois River, and the Upper Mississippi River.

The dominant port for coal export is Hampton Roads, Va., which is served only by railroads. However, there are coal exports from the ports of New Orleans and Mobile that involve movements of coal by barges. Coal exports through the Port of New Orleans nearly tripled going from 1.4 to 3 million tons from 1979 to 1980. Coal exported from Mobile nearly doubled from 3.0 million tons in 1979 to 5.8 million tons in 1980.

The commercial water transportation needs through the year 2000 were analyzed in the national waterway study under various sets of commodity forecasts. I should point out that the NWS findings are based primarily on evaluation of "physical" data, as contrasted with our more traditional, detailed economic evaluations conducted for specific projects.

I should also note that the administration's program for cost recovery for inland waterways when enacted, as well as shifts in other economic parameters, will alter these projections somewhat. I will give you a brief summary of these analyses:

a. Physical constraints to traffic are expected to occur by the end of this century at 22 U.S. lock sites located in nine reaches of the Inland and Great Lakes system.

b. Linehaul costs due primarily to anticipated delays, can be expected to increase by about 37 percent over the next 20 years if these bottlenecks develop.

c. In addition to physical capacity constraints, the reliability of the waterway system is an important concern. System reliability can be expected to decline as the average age of locks increases.

Fifty-two locks—44 United States plus eight Canadian—will be in excess of 50 years old by the year 2000. Thirty three of these—25 United States and 8 Canadian—are locks which are expected to be congested or constraining by the year 2000. In summary, many critical components of the existing waterway system are of a past technological era and will have to be replaced or modernized if the waterway system is to meet its full potential as a critical element of an integrated national transportation system.

d. Responsive maintenance of dredged channels is a problem which requires both financial resources as well as timely resolution of environmental issues associated with dredging and dredged material disposal. A failure to maintain adequate navigation depths can impact on the carrier industry in the short run by increasing costs and creating increased safety hazards. The ultimate consequence of an inadequate operation and maintenance program can be to create bottlenecks, equally as serious as those created by inadequate lock capacity.

e. The fundamental problems associated with our aging navigation system—reduced efficiency and increasing costs—are compounded by the growing demands for commercial navigation. This growing use contributes to the capacity problems. The competition for public investment funds will increase in the future, given the increasing rates of infrastructure deterioration. Therefore, a highly selective program for inland waterways modernization is required.

Waterways planning must fully reflect the role of the waterways in the U.S. economy. The constraints I previously identified—unless removed—will reduce the contributions of our inland waterway system to the national economy. Movements of coal can clearly become less efficient if identified constraints are not overcome.

There are several measures that could be taken to resolve water transportation problems. We need to develop a national program for our waterways that would:

a. Provide for cost sharing that would recover the costs of the inland waterways from their direct beneficiaries and relieve Federal taxpayers of the burden of waterway costs in the future.

b. Undertake modernization on a systems as opposed to the traditional project-by-project approach. Such modernization, with user fees, will increase the overall efficiency of the Nation's entire transportation system.

c. Emphasize timeliness so that waterway modernization is synchronized with changing traffic patterns.

d. Provide for continuous assessment of the technological improvements needed to provide for a modern water transportation system.

e. Coordinate transportation planning with defense planning.

f. Complete construction of critical projects such as locks and dam 26 and the Tennessee-Tombigbee Waterway which will improve our ability to transport efficiently coal and other commodities.

These measures should be pursued with a full realization of the increasing State and local roles regarding water-use decisions and with recognition of the importance of waterways in the Nation's overall economic development. These are important considerations for effective private, local, State, and Federal decisionmaking and investments. Large private investments have already been made in rail-barge transfer facilities to serve both domestic and export coal movements. Such investments are important to promote the Nation's coal exporting capability.

In summary, Mr. Chairman, the inland waterway system is a critical link in the exporting of coal. The system should be modernized to be able to respond to increasing demands and to continue to provide an efficient low cost, energy effective means of moving high volumes of bulk commodities. With the administration's cost recovery proposals in place, all economically justified construction and maintenance, as determined in the marketplace, can proceed on schedule with far less regard to Federal budget constraints. This would enhance further our opportunities to strengthen our national economy.

Mr. Chairman, this concludes my presentation. I'll be pleased to try to respond to any questions that you may have.

Senator WARNER. We're going to limit the questions.

I do have one, however. What do you indicate as your plan for the cure of the obstacles in the waterway, particularly the lock 26?

General GAY. The construction is underway. The first culver dam for the completion of the first phase of the dam construction itself is nearly closed. We would anticipate that lock 26, the first lock at the 26 site will be open for navigation in September of 1987.

Senator WARNER. Would you offer a way to modernize the system and improve the timeliness?

General GAY. The entire water system we've identified in our national waterway study has a number of bottlenecks I mentioned in my presentation. Those include lock and dam 26.

Senator WARNER. I guess I'm bearing on regulatory process.

General **Gay**. The administration is about to announce changes and improvements in streamlining of the 404 and section 10 regulatory process which I understand will be announced by the administration in January or February.

Senator **Warner**. That's what I had in mind.

General **Gay**. The idea would be to make it easy for the public and for business to get their permits in a more timely fashion.

Senator **Warner**. That's the point I wanted. Thank you very much.

We'll now have a panel, a railroad panel. We'll have Mr. Warren Barber, vice president, coal and ore, Consolidated Rail Corp.; John S. Snow, vice president of corporate affairs, CSX; William B. Bales, vice president for coal and ore traffic, Norfolk & Western; Harry Bruce, senior vice president of marketing, ICG, Chicago; Tom Graves, Union Pacific; William Dempsey, president of the American Association of Railroads. Thank you very much.

STATEMENT OF WILLIAM H. DEMPSEY, PRESIDENT, ASSOCIATION OF AMERICAN RAILROADS, WASHINGTON, D.C.

Mr. **Dempsey**. I'm Mr. Dempsey, and I'll just say a few words by way of introduction and then get out of the way in favor of my colleagues who are more experienced and more knowledgeable than I am about the subject which we're talking about which is so very important to the country.

Senator **Warner**. I've known many of your predecessors.

Mr. **Dempsey**. Just a few words of introduction as far as the overall picture as far as we see it from the railroad industry's perspective.

When President Ford and President Carter announced the program of increased coal production very rapidly and very radically their goal of 1.1 billion in 1985, there was some skepticism as to whether the rail industry could haul their share of the load. We carry about two-thirds of the coal and we anticipate that portion would continue.

That would mean by 1985 we could be carrying something in the way of 700 million tons and it's an awful lot more than we were carrying when this was announced.

We didn't have any doubts about it because we in the industry knew that our problem was not, well, it was one of surplus and access capacity. Since that time there have been studies conducted by a number of disinterested agencies and institutes. Agencies that had done studies by DOT run by the Bureau of Mines, by the Hudson Institute, one by the Office of Technology and Assessment and in each case the conclusion has been the same; namely, that the rail industry is quite capable of carrying its share of the load.

I can give you just one example that would be familiar to you, Mr. Chairman. Prior to the coal strike, the last coal strike we experienced in 1981, of course the utilities in all uses of coal were building up their inventories. During the 5-week period before that strike we carried coal without any problem at all at a rate that would be somewhat in the range I'd say of about between 600 and 650 million tons. So with the equipment that we have now, we can almost meet that goal of 700 million tons by 1985.

I've put a lot of figures in the record and I won't tax you with them, but I think as you examine them you will find them quite impressive.

I would say just one further word and that is of course it isn't just a matter of money to procure the coal, it's a matter of being able to carry the coal at a cost of the rates that are reasonable. We think that we demonstrated we can do that, and again, I have figures in the record.

I'll give you one. In 1969 part of the delivered price of the coal that was attributable to rail transportation was about 40 pecent. Today it's only 27 percent. What that means, of course, is that the price of rail transportation has gone up at a much less rapid rate than the price of coal itself and I would expect as the regulation of the alternative fuels that we're looking at goes out the window that that trend will continue.

Having said that I will turn to my colleagues and they will tell you about the experience of their own railroads. We don't have any order that we're going in. Why don't I just start over on my far left, with Mr. Bruce.

[The prepared statement of Mr. Dempsey follows:]

STATEMENT OF WILLIAM H. DEMPSEY
PRESIDENT OF THE ASSOCIATION OF AMERICAN RAILROADS

BEFORE THE ENERGY AND MINERAL RESOURCES SUBCOMMITTEE OF THE
SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES

Thursday, December 3, 1981

Mr. Chairman and Members of the Subcommittee:

I appreciate this opportunity to appear before you to discuss the ability of the railroads to provide the transportation service necessary to meet the nation's future demand for coal. The other railroad witnesses here today will discuss the role of their own railroads in this effort. As an introduction to those discussions, I would like to review briefly the way in which the system as a whole has responded and its capacity for growth.

Any expressions of doubt as to the railroads' ability to handle the future demand for coal transportation certainly have not come from the railroad industry nor, insofar as I am aware, from any impartial analysts. Reports from the U.S. Bureau of Mines in 1975, the Hudson Institute in 1976, the U.S. Department of Transportation in 1976 and 1978, and from the Congress' own Office of Technology Assessment in 1978, all conclude that the railroads have or can provide the capacity necessary to handle the projected growth in coal production.

The railroads now haul about 65 percent of all coal produced in this country. The rest is divided among barges, trucks and mine-mouth generation. The energy program announced by President Carter in 1977 called for coal production of 1.1 billion tons by 1985. Thus, if the railroads maintained a 65 percent share of the market, they would be called upon to handle a little more than 700 million tons by 1985.

There is, I suppose, some theoretical limit on the capacity of the railroad system. But the calculation of that limit would vary as the assumptions underlying the calculation varied. The essential point to bear in mind is that the railroad system is extremely flexible and can respond in a myriad of ways to any increased demand placed upon it -- and as a national asset that is perhaps its greatest strength.

For example, between 1969 and 1979, coal tons originated by the railroads fluctuated between a low of 380 million tons in 1971 and a high in 1977 of 435 million tons. In 1978, only 405 million tons moved.

But, in 1979, the railroads moved 500 million tons and, in 1980, they moved 535 million tons. The latent capacity of the system to respond was enormous.

Our experience in recent months underscores the extent to which the capacity of the system can be expanded to meet demand. Coal carloadings have regularly been running in excess of 130,000 per week. That level of activity would translate into an annual volume of well over 600 million tons.

When one takes into account the additions to equipment and the improvements in track and equipment utilization that are being made every day, it becomes abundantly clear that railroad capacity will not operate as a constraint in achieving even the most optimistic coal production goals. Let's look at a few of the figures:

-- 10,091 new and rebuilt open top hopper cars were installed in 1980, despite the recession. In the past four years, deliveries of open-top hoppers have totaled 51,374, most of which were destined for coal service.

-- At the start of 1981, there was a backlog of more than 7,000 open-top hopper cars -- the predominant type used to haul coal -- on order and undelivered to railroads.

-- Total capacity of the hopper fleet has increased by 10 percent since 1974 -- due primarily to the fact that the new cars now being installed have an average capacity of about 100 tons compared with an average of 67 tons for those retired.

-- To augment their ability to move coal, the railroads are now getting more work out of each car. Utilization gains in coal transportation have come mainly through the expanded use of unit trains, which now handle more than 50 percent of all coal hauled by railroads, compared with 41 percent in 1975, and only 29 percent ten years ago.

To meet the 1985 goal of 1.1 billion tons set by President Carter in 1977, coal production would have to grow at an annual rate of 5.8 percent in the period 1981-1985. That would increase rail traffic about 36 million tons per year, assuming railroads maintain their present share of coal transportation. Such increases in coal tonnage would produce -- in terms of total rail tonnage for all commodities -- an average annual increase of only 2.5 percent. That is a growth rate well within the capabilities of the system.

Not only are the railroads fully capable of meeting their share of the nation's foreseeable needs for the transportation of coal, but they are also capable of doing so at a reasonable price.

Today, the average cost for rail transportation is only 27 percent of the delivered price of coal. As recently as 1969, it was nearly 40 percent. That means simply that the prices charged by the railroads have not increased as much as the prices charged by the producers of coal. That trend is likely to continue as the remaining controls over the price of coal competitive fuels are withdrawn.

Thank you, Mr. Chairman. I would like now to yield to my colleagues, who will discuss the matter from the perspective of their individual railroads.

STATEMENT OF HARRY J. BRUCE, SENIOR VICE PRESIDENT, MARKETING, ILLINOIS CENTRAL GULF RAILROAD, CHICAGO, ILL.

Mr. BRUCE. Thank you, Bill.

Mr. Chairman, on behalf of the Illinois Central Gulf Railroad I thank you for the opportunity to participate in today's hearing. With the committee's permission, the ICG will submit written testimony for the record and during my allotted time I will summarize the key points of my testimony.

Much has been said of export coal in recent months, but little of this attention has focused on the Illinois basin and its coals. At the Illinois Central Gulf, we believe strongly in the export potential of the Illinois basin's enormous coal reserves. The committee is to be commended for its recognition of the potential contribution of the Illinois basin to the world energy marketplace.

I should point out that the Illinois Central Gulf, unlike many transportation companies, owns neither coal mines nor reserves. The focus of our export coal activity has been and continues to be the land transportation link between mine mouth and ship berth. Nevertheless, our success as a transportation supplier is dependent upon the viability of Illinois basin coal in the international marketplace.

Newcomers to the export arena, those with a beneficial interest in the overseas success of Illinois basin coal, had to begin from scratch. Because Illinois basin interests have no body of overseas marketing experience upon which to rely, it has been imperative to research virtually every aspect of the international marketplace and prospective distribution systems.

The Illinois Central Gulf Railroad's role has been and continues to be as a catalyst/strategist in developing overseas markets for Illinois basin coal. As such, the Illinois Central Gulf has conducted extensive research studies that, we believe, establish viable export coal markets for Illinois basin coals. Rather than belabor the specifics of these international markets today, let it suffice to note that this subject is treated in depth in our written statement. More germane to today's hearing are the transportation needs and considerations that have emerged during our research process.

For the past several months, we have all read a great deal about the need for new port facilities with 55-foot draft access to accommodate "super colliers" and for the Tennessee/Tombigbee River link. We have also read a great deal about the size—both current and projected—of international coal demand. Debate—complete with conflicting facts, estimates, and assumptions—rages on each of these issues. The glaring omission in much of this debate is the absence of definitive, pragmatic field research dealing with coal importers and their relationship to many of these issues. It is in this area that ICG research findings can make a contribution, a contribution in terms of direction and focus.

We don't have all the answers, but we think we have uncovered questions that must be answered before practical, productive solutions to the transportation needs of the international coal marketplace can be realistically proposed.

Before I touch on transportation issues, let me illustrate the questioning process we believe is necessary.

Many studies have been conducted to determine size and scope of the world coal market. Certainly, the MIT world coal study stands out in his area as a fine document. However, like most other research available today, it is macroscopic in perspective. It is an aggregate view of coal needs. A coal producer could not take a copy of the world coal study and develop a strategic marketing plan to export coal. What is needed is substantive data at the coal user level—complete with names and addresses. The coal producer also needs answers to questions, such as:

Who is going to be buying the coal? What kinds of coal can the buyer use? What coal specifications must be met? What are the environmental restrictions of the individual countries? What is the role of Government in each country's import coal purchases? Armed with the answers to questions such as these, a midwestern coal producer can realistically develop an overseas marketing plan and staff the management structure necessary to execute it.

In its role as a catalyst, the Illinois Central Gulf has thus far conducted market studies of Spain, Portugal, France, Italy, and Greece to answer the types of questions just outlined. The findings of these studies have been made available to interested Illinois basin coal producers. This summer, Freeman-United Coal Mining Co. signed its first export contract for Illinois basin coal with APROCAR, a purchasing entity for the Spanish cement industry. Spain was not even included in the world coal study.

Nevertheless, ICG research identified a cement industry market for Illinois basin coal of about 5 million tons per year. In addition, we outlined the importer's coal needs. Armed with specific market information, Freeman-United and ICG were able to develop an international coal transportation package for this export movement.

Many more questions remain unanswered, particularly in the area of distribution.

First, let's look at the question of port facilities to accommodate supercolliers.

Let me say as a preface that the Illinois Central Gulf has actively advocated deepening the Mississippi River channel to 55 feet to provide deep-draft access for vessels of this size. Despite our support for this project, research may reveal that, in fact, 43 or 49 feet may be the optimum. This is particularly true if one balances the enormous capital expenditures required for vessels as well as channel deepening and maintenance against the number of planned and existing overseas coal handling facilities with the capacity to accept supercolliers.

For example, a recent study by the R. S. Platou firm of Oslo, Norway, shows the difference in ocean transportation between Hampton Roads and Rotterdam to be aproximately $1.30 per ton in favor of 160,000 ton colliers over 90,000 ton vessels. The required draft for the 90,000 ton vessel is 42.6 feet whereas the 160,000 to vessel requires 53.1 feet. Does that $1.30 per ton saving in ocean transportation justify even the annual maintenance of a 55-foot draft, which in the case of the Mississippi River may run near $100 million per year? Who will pay dredging and maintenance costs? How will user charges effect the competitiveness of U.S. coals abroad? Or from the importer's perspective: Will the transshipping costs incurred as importers transfer coal from supercolliers to smaller ships for delivery to coal users negate the ocean transportation savings gained by using a supercollier?

As part of its market development studies, the Illinois Central Gulf compiled extensive data on planned and existing port facilities with bulk handling capabilities in 13 European countries. Much testimony has been given over the past year or so by the various representatives of some of these countries, and it's interesting to note the following, and copies of that report are available to any committee members if they so wish. Let it suffice to say that, of the 176 ports examined, only 7 have access and quay depths of 55 feet or more; 22 range from 40 to 55 feet and 147 are 40 feet or less in depth. In other words, 96 percent of the European destination ports could not handle supercolliers even if U.S. ports were deepened to accommodate them.

Where is the economic balance point for the shipper and importer? Is the 160,000 ton vessel more economical when all the distribution costs are considered, or might the 90,000-ton vessel be optimum? This is one of the questions we hope to have answered in a new research study that we are commissioning with members of the faculty of MIT's Alfred P. Sloan School of Management. Considerable research is still needed.

Although we obviously would benefit if our studies found that a system based on existing smaller scale ships and ports made economic and strategic sense, our Nation would benefit as well.

Until our study is completed, we can only encourage caution and recommend hard thinking before Congress considers allocating massive capital resources in an extremely risky and uncertain environment.

Another area ripe for examination in light of its potential contribution to export coal is the Tennessee/Tombigbee River link. The Tennessee/Tombigbee connection has long been touted as a direct distribution channel to the ports of the gulf coast. However, a congressional service report recently noted that the Tennessee/Tombigbee waterway cannot compete on a cost basis with railroads or the existing waterway system. Will coal producers in Illinois and Kentucky actually use it for export movements? Might not the costs of taking 8 barges through numerous narrow locks—at least 10—outweigh the time and cost of using the Tennessee, Ohio, and Mississippi to reach the gulf coast? Or of using existing rail links to reach exit ports? Again, pragmatic analysis is needed to answer these questions.

The Illinois Central Gulf has raised many questions here today. The common denominator, however, is that the logistics of exporting coal overseas must be viewed and analyzed from the distribution systems perspective. Each individual approach—whether it be a railroad or waterway project—has benefits to commend it. Nevertheless, the capital and financing costs of each must be weighed against actual domestic distribution needs, potential logistical contribution, and, most importantly, as a link with the logistical infrastructure of the prospective importing countries. A systematic, field-oriented research approach to the international coal marketplace is necessary, if the United States is to assume the future export coal leadership role we all desire.

For its part, the Illinois Central Gulf will continue to act as a catalyst and strategist in behalf of Illinois basin coal exporters by:

One, commissioning research to answer logistical questions;

Two, creating an awareness of Illinois basin coals in the international marketplace;

Three, providing informational materials to prospective exporters and importers;

Four, speaking out in behalf of the Illinois basin as opportunities arise; and

Five, working with ports and coal producers to develop attractive transportation service and pricing packages.

The committee's support and any assistance it might render would certainly be welcomed. Thank you very much.

[The prepared statement of Mr. Bruce follows:]

Testimony
of
Harry J. Bruce
Senior Vice President -- Marketing
Illinois Central Gulf Railroad

Submitted to: Energy and Mineral Resources Subcommittee
Energy and Natural Resources Committee
United States Senate
December 3, 1981
Washington, D.C.

Mr. Chairman and members of the committee, on behalf of the Illinois Central Gulf Railroad, I thank you for the opportunity to participate in today's hearing.

Much has been said of export coal in recent months, but little of this attention has focused on the Illinois Basin and its coals. At the Illinois Central Gulf, we believe strongly in the export potential of the Illinois Basin's enormous coal reserves. The committee is to be commended for its recognition of the potential contribution of the Illinois Basin to the world energy situation.

As anyone who has read the MIT World Coal Study knows, world trade in steam coal is expected to explode from 73 million tons in 1978 to as much as 800 million tons by the turn of the century. The Illinois Basin has 215 billion recoverable tons of coal reserves, largely steam coal. It represents one of the largest reserve areas in the United States, and the majority of these reserves are served by the ICG.

The ICG sees coal -- especially export coal -- as one of its biggest growth commodities. To many, that statement may seem ironic coming from what is erroneously thought of as a north/south "granger railroad," whose role has been limited to carrying coal from the mines to midwestern utilities or to the nearest rail/barge terminal. Unlike other major coal carriers -- and we are one of the 10 leaders -- ICG's main line parallels the Mississippi River, which carries the nation's heaviest barge traffic. Conventional belief in the cost efficiencies of barge transport would seem to dictate that ICG leave export coal to the river and concentrate on domestic coal and other commodity movements.

But traditional thinking -- at least, traditional rail/coal thinking -- is going to change. The Staggers Rail Act is beginning to change many of the historic railroad commercial habits. The rails now have the full range of freedoms and flexibilities with which to innovate and to compete with barges and any other mode, for that matter. Successful marketing of U.S. coal abroad demands creative, aggressive methods. It isn't enough to jump on a plane, fly to Europe and tell a coal buyer that you can give him great turnaround time on unit train coal movements. Nor is it enough for coal companies, with limited preparation, to whisk piles of contracts off to Europe with little thought to the needs and characteristics of the international market. The name of the export market for railroads and coal companies alike is "landed BTUs."

As with any change, this one also requires a learning curve. This learning curve will include altering some well-entrenched attitudes. This is particularly true when we talk about exporting Illinois Basin coal, since its viability in international markets is surrounded by a peculiar mythology.

Before debunking these myths, let me provide a frame of reference for my remarks and the ICG's optimism regarding the export market. Any discussion of any coal in the international marketplace is really a discussion of "landed BTUs." Thus, any evaluation of the international opportunities for Illinois Basin coal must include a thorough evaluation and assessment of each of the steps involved in delivering those BTUs -- a systems analysis of exporting Illinois Basin coal.

I should point out here that, unlike many transportation companies, the ICG owns no coal mines. The railroad's interest in the export market is simply to determine how the ICG might participate in the mine-mouth to ship-berth transportation of coal destined for export.

Each of the steps leading to the ultimate coal consumer has been subjected to systematic analysis by the ICG. Beginning with the characteristics and requirements of the export market, one must then blend in other steps important to a systematic approach: inland transportation options, port facilities for transshipping the coal, ocean transportation, destination ports, and the transportation options within the purchasing country.

Overkill? Not at all. The ICG first had to determine whether there was a profitable link in the distribution chain for the railroad. The customer, who is buying delivered BTUs, is financing the capital structure of the entire distribution chain. The ICG could provide the best, most economical service from mine-mouth to ship-berth, but if the shipment also must go to a destination overseas beyond our control, that last link is crucial to the viability of the whole chain. Or still, if the coal doesn't meet the buyer's specifications, the best transportation system in the world isn't going to convince the importer to buy.

Obviously, the ICG has determined that exporting Illinois Basin coal represents a major opportunity for the ICG. The ICG has devoted a great deal of time, money, and human resources to making sure that opportunity is real, rather than an export fantasy engendered simply by reading the World Coal Study. The railroad believes that its studies of the situation and answers developed thus far are sufficiently thorough and the results sufficiently realistic to soundly debunk the mythology mentioned earlier. Additional questions must be answered, but first let me take you through each of the myths and show you the facts the ICG analysis uncovered.

First, there is a common belief that Illinois Basin coal will not satisfy European coal buyers' specifications. The fact is that Illinois Basin coal is acceptable.

To determine the accuracy of the belief, ICG began collecting available data that would either corroborate or refute the statement. The market analysis began with MIT's World Coal Study, the first authoritative assessment of the world market and its needs. But the WOCOL study is a macroscopic view of the world marketplace and merely provided clues to specific areas that we examined in greater detail.

To focus more clearly on specific international opportunities for Illinois Basin coals, the ICG conducted its own study of the Basin, its coals, and probable international sales prospects for those coals. (Excerpts of this study appear in Appendix A.)

Some of the Illinois Basin coal served by ICG is higher in sulfur content than is generally acceptable under current U. S. federal regulations. But that isn't necessarily a major deterrent in dealing with exports to Europe.

The term "high sulfur" begs for closer examination. High, compared to what? One could go on at great length discussing the merits of one nation's or one region's steam coal properties. That is not what is important. What is important are the international market specifications. And sulfur content is but one of several key specifications that go into the demand equation. The important point is that there are markets abroad seeking coals which coal suppliers in the Illinois Basin can readily satisfy.

Currently ICG is fine tuning its focus on Europe even further, by developing in-depth studies of prospective buyers on a country by country basis. The first to be completed was Spain. The results of that study indicate that Illinois Basin coals are both usable and acceptable, sulfur notwithstanding, to the cement industry in Spain. Cement industry sources indicated that coal with up to two-and-one-half percent sulfur is readily acceptable. In the utility industry, there are several environmental initiatives under consideration that will make the Illinois Basin coals viable in this market.

The Spanish study didn't stop with determining the acceptability of Illinois Basin coals. It also pinpointed cement plants -- both existing and planned -- port facilities, coal demand and import projections, Spain's infrastructure for receiving and handling coal, coal procurement procedures, and an evaluation of the National Energy Plan of Spain. The ICG believes that it has verified the existence of an Illinois Basin coal market in Spain. The ICG has conducted similar studies of potential markets in Italy, Portugal, Greece, and France. The results of these studies are being made available to interested Illinois Basin coal producers.

Since there is an international market for Illinois Basin coals, let's look at the next link in the export chain -- transportation from the mine-mouth to the ship-berth. This link also is surrounded by myth, namely that, "Illinois Basin coal must move by barge to Gulf ports." Perhaps this myth has persisted because river water looks cheaper than welded steel rail. The fact is that the ICG can be totally competitive with barge transport from mine-mouth to ship-berth.

The natural tendency is to look at barge rates and rail rates, see the lower figure on the barge side, and say, "We better go by barge, it's cheaper." What those barge rates don't show on the surface are a number of "hidden costs."

For example, the barge rates don't include the mine to river transport costs, nor do they include the extra handling costs or product loss caused by transfer from rail or truck to barge. They also do not include heat value losses associated with lengthy exposure to snow or rain. Fast, efficient, unit train movements are reliable regardless of low water levels, ice jams, or congestion.

More important even than these factors is the flexibility the Staggers Act of 1980 has provided to aid railroads in developing and pricing the inland transportation segment of the coal export chain. This new flexibility has given us the wherewithal to work with coal producers and prospective importers to develop an energy delivery package that is beneficial to all concerned. The Act legitimized contract rates; it established new more flexible pricing procedures that enable railroads to respond quickly to competition in the marketplace.

For example, just prior to the passage of the Staggers Act, the ICG secured a new flexible tariff that permits it to change price on coal movements from Illinois to the Gulf on two days notice to any point in a range between $16.50 and $11.25 per ton. This allows ICG to position itself relative to barge competition in the market. Because the ICG secured the tariff before Staggers, we are the only railroad that has it. Barge rates are about $7 per ton, but remember that barge rates are only one factor in water transport. The "hidden" costs of water movements raise the figure substantially. The rail link in the chain represents one price from mine-mouth to ship-berth, all inclusive.

As you might imagine, the ICG took an especially hard look at this link and the economics involved, since it governs the profitability of ICG export coal movements. I can say without fear of contradiction that the railroad believes there is an exceptional opportunity for the ICG and its customers in mine-mouth to ship-berth coal movements. We soundly debunked this myth by shipping our first unit train of Illlinois Basin coal to the Gulf for export earlier this summer. Even, as I speak, the second ship raising its anchor.

The third link in the export chain centers on port facilities, and it, too, is surrounded by myth. This myth says, "There is no Gulf port facility to transload coal from rail to ship." This one has become myth only recently. Until this year, the statement was essentially true. In mid-January, however, an operating contract for the Public Bulk Terminal in New Orleans was awarded to Ryan-Walsh Stevedoring Company. I'm proud to say that our testimony on behalf of Ryan-Walsh and the export potential of Illinois Basin coal helped revive the Bulk Terminal.

This facility is fully operational. The rennovation work on the terminal permits it to readily handle up to four million tons of Illinois Basin coal per year. The Ryan-Walsh Bulk Terminal has an unloading rate of approximately 1200 tons per hour, blending capabilities, ample ground storage, and rapid ship loading -- about 1200 tons per hour.

But the Ryan-Walsh Bulk Terminal provides only interim rail to ship transloading. Its limited capacity is insufficient for the amount of coal that should be moving into international waters from the uncongested, warm weather Port of New Orleans. Nevertheless, it does give Illinois Basin coal an efficient, economical entre to world markets today.

Recently, Hunt International Coal and Trading Company announced construction of a new state-of-the-art export coal terminal near Baton Rouge, Louisiana. Slated for full operation by mid-1983, Granada Export Terminal, which is served by ICG, has an annual capacity of 15 million tons of coal.

Granada Export Terminal will accommodate 60,000-ton Panamex colliers. It also will have the capability to accept "super colliers" should the Mississippi River ever be dredged to 55 feet. Granada will feature state-of-the-art coal handling technology to load vessels directly from rail cars, barges and ground storage. The facility also will accommodate three million tons of ground-based storage with direct unloading from both rail and barge.

Features of the terminal include complete land-based blending capabilities, conveyor belt weighing and sampling for analysis, and a vessel loading rate of approximately 9,000 tons per hour, which permits complete berthing and loading of a Panamex collier within 20 hours.

The Granada Export Terminal provides the Gulf Coast with capabilities necessary for the Illinois Basin to play a major role in the international coal market.

The fourth link in the chain is collier service to the importing country. Again, it is shrouded in myth, which says, "Ocean freight from New Orleans will be more expensive." Implicit in this statement is the assumption that more expensive means prohibitively more expensive. As pointed out earlier, the discussion is really one of landed BTUs.

First, ocean freight from New Orleans is usually higher than that from East Coast ports, exclusive of demurrage. However, congestion at eastern ports makes additional Gulf coal handling capacity more appealing to the international coal market.

Not only does the use of New Orleans as the exit port eliminate the monumental East Coast demurrage charges, but it saves weeks of delay in shipping time, thus improving ship utilization. Outlined here are some of the estimates ICG developed when it assessed this link in the chain:

Landed BTU Cost

	Via Gulf Coast	Via East Coast
Coal Price	27-32	30-35
Rail Rate	11.00-12.25	14.50-15.00
Rail to Vessel	1.75-2.50	.45
Ocean Rate	15-18	15-18
Demmurrage	-	7-11
Unloading	2	2
Total Landed Cost Per Net Ton	$56.75 - 66.75	$68.95 - 81.45
Landed Cost Per Million BTU	$ 2.41 - 2.84	$ 2.87 - 3.39

The ocean freight difference is estimated to be between one and two dollars per ton, favoring the East Coast. However, when all factors are considered, the situation shifts, putting the Gulf Coast in a more favorable light. The estimated cost per million landed BTUs in Rotterdam from East Coast ports is between $2.87 and $3.39. From the Gulf Coast, the estimated range is $2.41 to $2.84. As you can see, ocean freight is not the proverbial weak link in the export chain.

The two final links in the chain are port facilities and the transportation systems of the importing countries. These are the only two of the six links not shrouded in myth. Nevertheless, they both require careful examination in any assessment of market potential.

Our Spanish study examined both these subjects during the basic market analysis, and the results supported the existence of a Spanish market for Illinois Basin coal. Current port facilities are adequate to handle Spain's import coal needs for the time being. New facilities are planned to provide the necessary additional capacity to handle future needs.

Preliminary information on other prospective European importing countries has yet to reveal weakness in either of these links in the chain. However, there is a problem that must be surmounted before the Illinois Basin exports begin.

There are many questions, particularly regarding distribution issues, that must be examined in-depth by an independent entity.

For the past several months, we have all read a great deal about the need for new port facilities with 55-foot draft access to accommodate "super" colliers and for the Tennessee/Tombigbee River link. We have also read a great deal about the size -- both current and projected -- of international coal demand. Debate -- complete with conflicting facts, estimates, and assumptions -- rages on each of these issues. The glaring omission in much of this debate is the absence of definitive pragmatic, in-depth field research dealing with coal importers and their relationship to many of these issues. And, it is in this area that that ICG research findings can make a contribution, a contribution in terms of direction and focus.

We don't have all the answers, but we think we have uncovered several questions that must be answered before practical, productive solutions to the transportation needs of the international coal marketplace can be realistically proposed.

Before I touch on transportation issues, let me illustrate the questioning process we believe is necessary.

Many studies have been conducted to determine size and scope of the world coal market. Certainly, the MIT World Coal Study stands out in this area as a fine document. However, like most other research available today, it is macroscopic in perspective. It is an aggregate view of coal needs. A coal producer could not take a copy of the World Coal Study and develop a strategic marketing plan to export coal. What is needed is substantive data at the coal user level -- complete with names and addresses. The coal producer also needs answers to questions, such as:

Who is going to be buying the coal? What kinds of coal can the buyer use? What coal specifications must be met? What are the environmental restrictions of the individual countries? What is the role of government in each country's import coal purchases? Armed with the answers to questions such as these, a midwestern coal producer can realistically develop an overseas marketing plan and staff the management structure necessary to execute it.

In its role as a catalyst, the Illinois Central Gulf has thus far conducted market studies of Spain, Portugal, France, Italy and Greece to answer the types of questions just outlined. The findings of these studies have been made available to interested Illinois Basin coal producers. This summer, Freeman-United Coal Mining Company signed its first export contract for Illinois Basin coal with APROCAR, a purchasing entity for the Spanish cement industry. Spain was not even included in the World Coal Study. Nevertheless, ICG research identified an annual cement industry market for Illinois Basin coal of about five million tons per year. In addition, we outlined the the importer's coal needs. Armed with specific market information, Freeman-United and ICG were able to develop an international coal transportation package for this export movement.

Many more questions remain unanswered, particularly in the area of distribution.

First, let's look at the question of port facilities to accommodate "super colliers."

Let me say as a preface that the Illinois Central Gulf has actively advocated deepening the Mississippi River channel to 55 feet to provide deep-draft access for vessels of this size. Despite our support for this project, research may reveal that, in fact, 43 or 49 feet may be the optimum. This is particularly true if one balances the enormous capital expenditures required for vessels as well as channel deepening and maintenance against the number of planned and existing overseas coal handling facilities with the capacity to accept "super colliers."

For example, a recent study by the R.S. Platou firm of Oslo, Norway, shows the difference in ocean transportation between Hampton Roads and Rotterdam to be approximately $1.30 per ton in favor of 160,000 ton colliers over 90,000 ton vessels. The required draft for the 90,000 ton vessel is 42.6 feet, whereas the 160,000 ton vessel requires 53.1 feet. Does that $1.30 per ton savings in ocean transportation justify even the annual maintenance of a 55-foot draft, which in the case of the Mississippi River may run near 100 million dollars per year. Who will pay dredging and maintenance costs? How will user charges effect the competitiveness of U.S. coals abroad? Or from the importer's perspective: Will the transshipping costs incurred as importers transfer coal from super colliers to smaller ships for delivery to coal users negate the ocean transportation savings gained by using a super collier?

As part of its market development studies, the Illinois Central Gulf compiled extensive data on planned and existing port facilities with bulk handling capabilities in 13 European countries. Copies of that report are available to any committee members who would like them. Let it suffice to say that, of the 176 ports examined, only seven have access and quay depths of 55 feet or more. Twenty-two range from 40 to 55 feet and 147 are 40 feet or less in depth. In other words, 96 percent of the European destination ports could not handle "Super Colliers" even if U.S. ports were deepened to accommodate them.

Where is the economic balance point for the shipper and importer? Is the 160,000 ton vessel more economical when all the distribution costs are considered, or might the 90,000 ton vessel be optimum? This is one of the questions we hope to have answered in a new research study that we are commissioning with members of the faculty of MIT's Alfred P. Sloan School of Management. Considerable research is needed.

Although we obviously would benefit if our studies found that a system based on existing smaller-scale ships and ports made economic and strategic sense, our nation would benefit as well.

Until our study is completed, we can only encourage caution and recommend hard thinking before Congress considers allocating massive capital resources in an extremely risky and uncertain environment.

Another area ripe for examination in light of its potential contribution to export coal is the Tennessee/Tombigbee River link. The Tennessee/Tombigbee connection has long been touted as a direct distribution channel to the ports of the Gulf Coast. For example, a congressional service report recently noted that the Tennessee/Tombigbee waterway cannot compete on a cost basis with railroads or existing waterways. Will coal producers in Illinois and Kentucky actually use it for export movements? Might not the costs of taking eight barges through numerous narrow locks -- at least ten -- outweigh the time and cost of using the Tennessee, Ohio and Mississippi to reach the Gulf Coast? Or of using existing rail links to reach exit ports? Again, pragmatic analysis is needed to answer these questions.

The Illinois Central Gulf has raised many questions here today. The common denominator, however, is that the logistics of exporting coal overseas must be viewed and analyzed from the distribution systems perspective. Each individual approach -- whether it be a pipeline, railroad, or waterway project -- has benefits to commend it. Nevertheless, the capital and financing costs of each must be weighed against actual domestic distribution needs, potential logistical contribution, and, most importantly, as a link wth the logistical infrastructure of the prospective importing countries. A systematic, field-oriented research approach to the international coal marketplace is necessary, if the United States is to assume the future export coal leadership role we all desire.

For its part, the Illinois Central Gulf will continue to act as a catalyst and strategist in behalf of Illinois Basin coal exporters by:

1. Commissioning research to answer logistical questions,
2. Creating an awareness of Illinois Basin coals in the international marketplace,
3. Providing informational materials to prospective exporters and importers,

4. Speaking out in behalf of the Illinois Basin as opportunities arise,
5. Working with ports and coal producers to develop transportation service and pricing packages attractive to potential importers.

The committee's support and any assistance it might render will certainly be welcomed. Thank you.

# # # #

Appendix A

Excerpts From:

"The World Coal Export Market"
October, 1980

An ICG Market Study

ILLINOIS BASIN COAL AND THE WORLD EXPORT COAL MARKET

I. United States in the World Export Coal Market

The United States has been the largest exporter of coal for many years and accounts for almost one-fourth of the world's export coal trade. The major portion of United States coal exports have been to the steel industry, which uses a high grade coal known as metallurgical or coking coal. The demand for this type coal is directly related to the demand for steel.

A clear indication of the important role played by the United States in the total world market for export coal is presented in Table VI.

Table VI

Actual Coal Exports of Major Exporting Countries
(Million Tons)

	Year			
Country	1976	1977	1978	1979
United States	59.9	54.2	41.1	65.0
Australia	34.2	42.7	43.0	42.0
South Africa	6.6	14.0	17.1	25.0
Poland	43.1	43.1	44.7	45.0
Soviet Union	29.6	28.4	29.0	28.0

Source: Subhash Bhagwat, International Coal Trade: Trends and Practices, (Report to the Illinois Geological Society, 1980).

It should be noted that 1978 United States export totals were dramatically reduced by the 110-day United Mine Workers' strike.

According to WOLCOL, the United States will be capable of satisfying over 35 percent of the future export coal demand. This amounts to a potential of 221 to 386 million tons of United States export coal.

The United States, in addition to being a major metallurgical coal exporter, is also expected to play a dominant role in satisfying the increasing worldwide demand for steam coal. Export steam coal demand in the electric utility market will become more prevalent because of constraints on the availability of oil.

One of the most prominent factors that will determine the level to which the United States participates in the growing world market is the condition and capabilities of present and future port facilities.

An adequate port infrastructure is a necessary link in meeting the demand to supply the world with United States coal. Present transshipment facilities, located almost exclusively on the East Coast, are barely adequate to meet today's needs, and are being strained by the rapid increase in coal tonnage moving through the facilities. Tremendous congestion and lengthy delays are occurring as a result of the lack of ground storage, blending activities, and the sheer volume of tonnage being handled. These delays, at the East Coast ports of Baltimore, Norfolk, and Newport News, are causing ships to incure demurrage charges of $15,000 or more per day, and are adding upwards of $10.00 per ton to the delivered price of coal. Many of the older ports have historically been geared more toward loading low-volatile metallurgical coal, which requires special handling, rather than for the high volumes of steam coal being handled today.

A New York Times article on the East Coast port problems accurately depicts the major problems confronting coal exports through Eastern ports. A common sight is many vessels offshore awaiting berth availability. For example, on September 11, 1980, 51 ships were anchored in the Hampton Roads area awaiting coal loading. Many of these vessels will wait from three to four weeks before being loaded.

Total 1979 coal exports through various port facilities are shown in Table VII.

Table VII

United States Overseas Exports of Bituminous Coal by Port of Exit
Total Exports Excluding Great Lakes Ports

Port of Exit	1979 (000's tons)	% of Total
Baltimore	10,184	17.2%
Hampton Roads	45,753	77.5
Mobile	1,641	2.8
New Orleans	1,410	2.4
Philadelphia	55	0.1
TOTAL	59,043	100.0%

Source: Mark E. Tomassoni, "Coal: The Pressure's on Ports," American Seaport (August, 1980), p.8.

The two major port facilities at Hampton Roads, Virginia, handle 77 percent of total United States coal exports. The Chessie System owns and operates Piers 14 and 15 at its Newport News, Virginia Terminal. Coal is stored in railroad equipment in their yard, which can hold up to 6,500 loaded cars. Additional track storage is also available nearby. Water depth at the Pier 14 berth is 45 feet and 38 feet at Pier 15. Coal is loaded into vessels at a rate of up to 9,000 tons per hour. The Chessie estimates that 15 million tons of coal will be handled through Newport News in 1980. The maximum capacity is about 20 million tons per year.

A. T. Massey, a large Eastern coal broker, has purchased the Chessie System's Pier 9 at Newport News and will construct a modern coal terminal at this site. When completed the terminal will have a throughput capability in excess of ten million tons annually and will alleviate some of the congestion now being experienced at Hampton Roads. Total construction cost is estimated at $53 million.

The other terminal at Hampton Roads is Lamberts Point, which is owned and operated by the Norfolk & Western. Pier 6 is the world's largest coal-handling facility. The maximum operating rate is 16,000 tons per hour when two vessels are being loaded simultaneously. Storage is in railroad cars and the rail yard has a capacity of 15,600 cars. Water depth at Pier 6 is 46.5 feet. The Norfolk & Western origniates coal movements from over 200 mines in West Virginia, Virginia, Ohio and Kentucky. In 1980, over 30 million tons of coal will be handled through Lamberts Point, and less than ten percent will be steam coal.

Conrail's throughput is nearly two million tons per year through the Port of Philadelphia Pier 124. Conrail is developing plans to modernize existing facilities and expand to a new terminal in the Delaware Port Terminal area. Conrail's modernization program will increase coal-handling capacity to ten million tons annually and will be completed in 1982.[1]

The Chessie System also operates a pier at Curtis Bay in Baltimore, Maryland. In 1979, 17 percent of United States coal exports were shipped through Baltimore. The Chessie can store 4,700 cars of coal at the terminal. Water depth is 42 feet on the south side of the pier, and 30 feet on the north side. Total export capacity is estimated at 12 million tons per year. A temporary shutdown last year for maintenance contributed to the already growing congestion problem.

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[1] "Conrail to Expand Export Facility," Coal Mining and Processing (September, 1980), Vol. 17, No. 19, p. 31.

The New Orleans Public Bulk Terminal, with existing open ground storage for 85,000 tons of coal and expansion capacity for up to 150,000 tons, is located on the Mississippi River Gulf outlet (Industrial Canal) and currently provides the Port of New Orleans with coal-exporting facilities. Current channel depth is 36 feet, which can accomodate vessels up to 40,000 deadweight tons (DWT). The Bulk Terminal can load vessels at a rate of 2,000 tons per hour and has a maximum annual throughput of about 4 million tons.

The Port of Mobile, Alabama has a bulk terminal operated by McDuffie Terminals, Inc., which is now capable of handling approximately three million tons of coal per year. When current expansion plans are completed, McDuffie Island will be able to handle up to seven million tons of coal per year. The river channel is 40 feet deep and open ground storage will accommodate 500,000 tons of coal. Vessels are loaded at a rate of 4,000 tons per hour.

Long Beach, California is handling a few test shipments of export coal originating in the western coal fields of Utah and Colorado. Open storage today is 50,000 to 80,000 tons. Vessels are loaded at a rate of 1,200 tons per hour. The channel depth is 40 feet.

Additional investments will be necessary to modernize and enlarge the actual transfer facility equipment in the United States to be able to effectively compete in the world marketplace.

Deepening of many ports and channels will enable newer and larger coal vessels to be used, thus creating greater economies of scale. Significant ground storage will enhance a port's ability to attract the available export coal business. Increased ground storage will also reduce coal storage in railroad cars, thereby minimizing car requirements and investment.

II. Ability of Illinois Basin Coal to Compete in the World Export Market

A. Availability/Supply

The Illinois Basin, with its massive coal reserves, is capable of playing a vital role in meeting worldwide coal demand. The Illinois Basin coal fields are located in Illinois, Indiana and Western Kentucky. Counties served by the Illinois Central Gulf contain approximately 115 billion tons of recoverable coal reserves.

Historically, the United States has exported metallurgical coal to the world's steel-making industry. Because most metallurgical coal is located in the East, Illinois Basin producers have not been a significant factor in the export coal market.

Reduced demand for metallurgical grade coal has led to oversupply situations, resulting in reduced prices; this, in turn, has allowed metallurgical coal to move into steam coal markets. Metallurgical coal is desirable as a utility fuel because of its high BTU level and low ash and moisture content. These conditions have made it difficult for Illinois Basin producers to initially penetrate the export steam coal market.

When metallurgical coal demand increases with future growth in the steel-making industry, prices will increase thereby making metallurgical coal uneconomical for use as steam coal. Demand by utilities for a heating fuel will then shift back to steam coal, including that which is available in the Illinois Basin.

1. Supply/Reserves

Within the Illinois Basin, there are more than 215 billion tons of identified coal reserves.[2] Of these total coal reserves, better than 75 percent are known to be within the State of Illinois -- 161 billion tons. Of this amount, 115 billion tons of recoverable coal reserves are located in counties served by the Illinois Central Gulf. Illinois contains more coal reserves than any other state, except Montana.

Coal reserves in the Illinois Basin are found in large continuous blocks. This concentration of coal reveals 19 Illinois counties with over three billion tons each, and 13 of these counties are served by the Illinois Central Gulf Railroad.

Because of this concentration of coal reserves, any expanded coal production in the Illinois Basin is expected to come from Illinois coal mines.

2. Capacity of Producers

In retrospect, it appears that the 1973 oil embargo, far from being a panacea for the coal industry, was instead a damaging event from which the industry has yet to recover. Margins are still low as a result of depressed prices, declining productivity and excess capacity. Most authorities estimate that current excess coal capacity is more than 100 million tons annually.[3] The estimated over-supply breakout by region follows:

Territory	Tons (In Millions)
Eastern Coal	35
Illinois Basin Coal	15
Western Coal	50
TOTAL	100

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[2] George F. Nielsen, et al., 1980 Keystone Coal Industry Manual (New York, NY: McGraw-Hill Mining Publications, 1980), p. 497.

[3] The Coal Industry Quarterly Review, New York, NY: Merrill Lynch, Pierce, Fenner & Smith, Inc., (August, 1980).

Production capacity of the coal industry continued to climb as producers, convinced that the coal boom wa soon to come, remained in the market at reduced prices. United States coal production, static at approximately 600 million tons annually from 1970 to 1974, grew to nearly 700 million tons by 1977. By 1979, it grew to 775 million tons and is expected to reach 815 million tons in 1980. Industry analysts predict that the coal industry will continue to experience excess capacity and depressed prices through the early 1980s.

The impact of these trends has been felt nationwide, especially in the Illinois Basin where coal mines have closed as a result of low profitability, excess production, and restrictive Environmental Protection Agency standards. This has reduced marketability of this type coal. Many mines that were opened in the 1960s produce high-sulfur coal, which was adequate for commercial use at the time, but now has limited marketability because of Environmental Protection Agency emission restrictions. Slackened industrial coal demand also has diminished the potential to sell coal in the open market. Other mines are closing because of restrictions imposed by government regulation on strip mining reclamation.

Coal produced in Illinois and West Kentucky has declined in recent years as a result of these factors. For example, in 1974, Illinois mines produced 58 million tons of coal, but only produced 49 million tons in 1978. Western Kentucky mines produced 52 million tons of coal in 1974, but only 39 million tons in 1978.

More than 30 coal producers operate in the Illinois Basin. Much of this coal production comes from mines operated by subsidiaries of large United States corporations, which provide a strong financial base vital to future expansion plans. Examples of this ownership are depicted in Table VIII.

Table VIII

Ownership of Illinois Basin Coal Mining Companies

Mining Company	Parent Company
AMAX Coal Company	AMAX, Inc.
Old Ben Coal Company	Sohio Petroleum Company
Consolidation Coal Company	Continental Oil Company
Freeman United Coal Mining Company	General Dynamics
Island Creek Coal Company	Occidental Petroleum Corporation
Zeigler Coal Company	Houston Natural Gas Corporation
Arch Mineral Corporation	Ashland Oil Co./Hunt Petroleum Corp.
Pittsburg & Midway Coal Mining Co.	Gulf Oil Company
Sahara Coal Company, Inc.	Sahara Coal Company
Inland Steel Coal Company	Inland Steel Company
Kerr-McGee Coal Corporation	Kerr-McGee Corporation
ARCO Coal Company	Atlantic Richfield Company

Source: George F. Nielsen, et al., 1980 Keystone Coal Industry Manual (New York, NY: McGraw-Hill Mining Publications, 1980), P. 710.

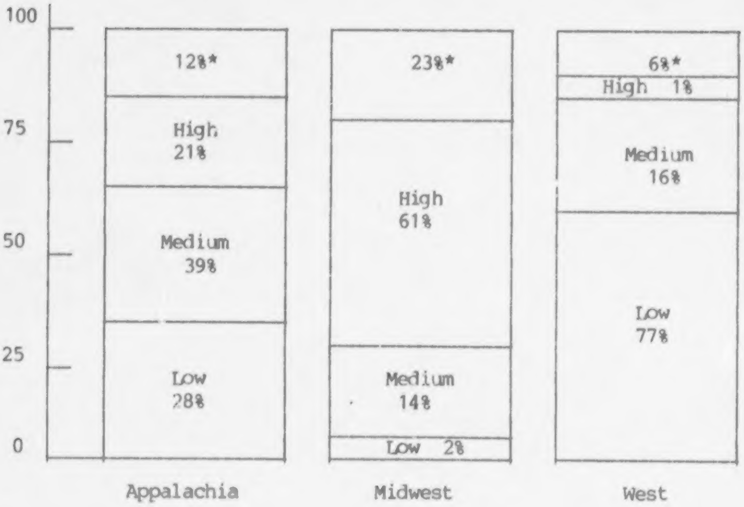
Future production from Illinois Basin mines will have to come from deep mines which are capital-intensive and technically far more complex than surface mining. However, the operating experience and financial strength these producers possess will provide a distinct advantage to the future development of Illinois Basin coals.

B. Quality

A primary concern of utilities in purchasing coal is its sulfur content. The sulfur content of United State coal reserves is indicated in Table IX. Western coal reserves are primarily low-sulfur (less than one percent) whereas the sulfur content of Appalachian coal reserves range from low to high. The bulk of Midwestern reserves are high-sulfur (greater than three percent).

Table IX

United States Coal Reserves -- Sulfur Content



Low sulfur	1% or less
Medium sulfur	1.1 to 3%
High sulfur	3% or more
*	Unknown

Source: World Coal Study, Future Coal Prospects: Country and Regional Assessments (Cambridge, Massachusetts: Ballinger Publishing Company, 1980), P. 457.

Table X Summarizes the quality characteristics of representative United States coal reserves by state, coal type, BTU content, sulfur and ash percentages.

Table X

Characteristics of Representative Coals

State	Coal Type	BTU/lb.	% Sulfur	% Ash
Pennsylvania	Bituminous	12,067	2.03	15.0
West Virginia	Bituminous	12,516	2.39	12.1
Ohio	Bituminous	11,047	3.42	15.8
Kentucky (East)	Bituminous	11,784	1.23	12.5
Kentucky (West)	Bituminous	11,990	3.15	9.5
Illinois	Bituminous	10,775	2.92	11.4
Alabama	Bituminous	11,740	1.43	14.1
Colorado	Bituminous	10,925	0.49	9.4
Wyoming	Subbituminous	9,037	0.50	8.3
Utah	Bituminous	11,569	0.63	11.9
Montana	Subbituminous	8,957	0.64	7.6

Source: Federal Energy Regulatory Commission, 1978, Annual Summary of Cost and Quality of Electric Utility Plant Fuels, 1977.

Major concerns regarding Illinois Basin coal center around its quality and sulfur content. General characteristics and qualities of Illinois Basin coal include a BTU range of 10,100 to 12,700; a sulfur content range from from 1.0 to 5.0 percent; an ash content of 5 to 7 percent. This coal is basically high-quality for steam coal purposes, except for the generally high-sulfur content.

Approximately five billion tons of total Illinois coal reserves have a sulfur content of two percent or less.[4] These reserves are of acceptable grade for steam coal and will play an important role in future Illinois Basin export when mines are developed.

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[4] Jack A. Simon and M.E. Hopkins, Coal Resources of Illinois (Illinois State Geological Survey, Illinois Minerals, 1974).

C. Competitive Environment

1. Geographic Factors

Illinois Basin refers to coal seams in the states of Illinois, Indiana, and Western Kentucky. The major rivers in the area are the Mississippi, Illinois, Ohio, Tennessee, Green, and Kaskaskia. Surrounding the Basin are several major cities, including Chicago, St. Louis, Louisville, and Indianapolis.

2. Competitive Pricing

Illinois Basin coal can be competitive in the world export market. Each link in the production and transportation chain is competitive, including the minehead price of coal, rail rates, handling charges and vessel rates. The Illinois Central Gulf's role in this chain is as a transportation company offering competitive freight rates and service. The consignee is assured that the Illinois Central Gulf's price will remain competitive as a result of the automatic pressures from East Coast producers and by inland water carriers on the Mississippi River System. In fact, Illinois Basin coal for export may have the edge in certain areas. First of all, total transit time to New Orleans from the Illinois Basin will be faster via the Illinois Central Gulf than via barge. Secondly, the Illinois Central Gulf main line is in good physical condition and is ready to handle direct movement of coal unit trains from the Midwest to the Gulf. Additionally, economical and demand-sensitive unit train rates can now be offered. The Interstate Commerce Commission has recently granted the Illinois Central Gulf permission to readily compete for the export market by authorizing it to raise or lower rates on two days' notice to meet competitive conditions.[5]

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[5] Illinois Central Gulf Railroad Coal Tariff 4163, Chicago, Illinois, (October 7, 1980).

3. Environmental Factors

The higher sulfur content of Illinois Basin coal, from many of the existing mines, often restricts its use today in various markets. Together with the United States, Europe and Japan have strict environmental standards limiting the burning of high-sulfur coal. The sulfur maximum in these countries is two percent and preferrably less. Blending of Illinois Basin coals at the port of exit or at destination is considered a realistic means to meet stringent sulfur laws and should be tested to prove this hypothesis.

4. World Market Competition

The United States, China and the Soviet Union hold the majority of world coal reserves (62.5 percent), with Australia, South Africa, Canada and Germany holding most of the balance. France, Italy and Japan are the major importers. The export steam coal market is expected to rise dramatically as a percent of total world exports, placing the Illinois Basin, which has large reserves of steam coal, in a strong position to compete effectively. Because of its vast resource base, the financial strength of the coal producers, and an excellent transportation infrastructure, Illinois Basin coal can become competitive with other exporting countries and with Eastern and Western United States coal entering the export market.

III. Factors Affecting Export of Illinois Basin Coal

A. Coal Producers

WOCOL has documented the potential of the steam coal export market. Some producers in the Illinois Basin region are beginning to utilize long-range strategic planning to meet the anticipated export demand. This strategic planning includes a major effort to identify low-sulfur coal deposits and create an effective marketing campaign to describe the advantages of using Illinois Basin Coal. Reactions from Illinois Basin coal Company executives are positive and many are actively engaged in marketing their coal for short and long-term buyers.[6] This is a major change of policy from the reactive marketing posture of the recent past, demonstrated by many companies in connection with the domestic utility market.

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[6] Interviews with executives from Freeman United Coal, Kerr-McGee, Old Ben Coal, Island Creek Coak, and U.S. Steel.

B. Regulatory Environment

The short-term demand (1980-1983) for Illinois Basin coal in the export market may be limited by several environmental factors. Japan and the European importing countries, major market targets for United States steam coal, have strict environmental regulations limitng coal utilization to those grades low in sulfur content (two percent or less). Presently, several existing mines in the Illinois Basin region are capable of meeting this coal grade requirement. These mines include Freeman United (Orient III and VI Mines), Old Ben Mine No. 21, Inland Mine and Sahara Mine, all located in Southern Illinois, and located on the Illinois Central Gulf. Generally, West Kentucky coals are not in this required sulfur range. However, future blending of various type coals may alleviate this problem.

1. Limiting Factors

The vast majority of potential importers believe that Illinois coal has a high-sulfur content, ranging from three to five percent. Illinois Basin coal producers must educate buyers and potential buyers that there are many grades of Illinois Basin coal available, including considerable low-sulfur coal.

2. New Technology

Several new coal-using technologies are also expected to enhance the demand for Illinois Basin coal. These technologies include fluidized bed combustion, coal-oil mixtures, coal gasification and coal liquefaction.

One of the more promising new technologies, fluidized bed combustion, offers a number of important advantages over conventional boiler utilization. This process absorbs sulfur oxides and minimizes the problem of removing them from the flue gas; allows the use of coals with high quantities of ash; and requires smaller, more efficient boilers. However, expanded research and development of these technologies is required, which will delay commercial application perhaps 10 to 20 years.

C. Transportation Requirements and Capabilities

In terms of transporting Illinois Basin coal to the export market, the rail system and the water system are in place. The Illinois Central Gulf main line is in good condition to handle unit trains from Illinois to the Gulf and, more importantly, is a direct north-south route.

Transit time to the Gulf from the Illinois Basin via railroad unit trains is approximately two to three days, while barges can take as long as two weeks. The elimination of the rail-to-barge or truck-to-barge transfer stage will also save time and expense when shipping all-rail.

As a rail transportation company, very little additional investment by Illinois Central Gulf is necessary to handle a large increase in export coal traffic.

IV. Conclusion

With proper planning, the necessary coal mines, transportation facilities, terminal facilities, and construction of modern colliers can be accomplished to handle future coal exports. Planning will necessitate close cooperation between coal producers, transportation companies, and the coal-importing countries.

The long-term demand for Illinois Basin coal in the export market is more optimistic than that found in the short term. Technical advances in the control of particulate and gaseous emissions will be required to meet increasingly strict evnironmental regulations. Generally, the importing countries do not have any less restrictive environmental regulations than the United States. In this area considerable progress has been made in recent years to provide the purchasers with the best mix of equipment, price, availability and reliability of pollution control equipment. Progress in the area of emission controls and sulfur removal is of particular importance to the marketability of Illinois Basin coal because of its level of sulfur.

Marketability of Illinois Basin coal will be enhanced by new technology, including advanced scrubber systems, improved washing techniques, blending of various grades of coal, and other technological developments.

Coal ownership by major oil companies has brought vast capital resources and management expertise to the coal industry in the Illinois Basin, which is vital to its expansion.

The Illinois Basin export steam coal market holds the potential for high return at relative low financial exposure to the Illinois Central Gulf. The current and potential production capacity of the Illinois Basin producers, coupled with the 115 billion tons of coal reserves, including the five billion tons of low-sulfur coal reserves, will provide the foundation for Illinois participation in the export coal market.

Senator **Warner**. Thank you. That's a very informative statement. You got my attention with the citation of 96 percent of the European destinations, that takes some consideration of every little point. I mean you've got to sort of weigh certain ports as being the principal ones.

Mr. **Bruce**. That's a pretty good point.

Senator **Warner**. I mean it's a startling statistic.

Mr. **Bruce**. But it is a fact that needs to be taken into consideration. For examples our studies of Spain, Portugal, Italy, and Greece, these are the southern tier countries, and even as this meeting is going on a ship is loading at the Rhine Walsh Export terminal in New Orleans, the second ship going to Spain. You can't take that coal in large colliers to Spain. It won't fit.

You can take large colliers into Rotterdam, that's true, but what are we going to do with it after you get it into Rotterdam? What is the question of infrastructure, the logistical movement from Rotterdam to Spain? We found also that in the entire country of Spain there are only 200 open-top hopper cars to be able to handle coal. That's why the facilities are built close to the ports.

Senator **Warner**. Now into Spain, I think the port is called Gijon, it's underway now to improve it.

Mr. **Bruce**. There is much conversation in Europe about the number of ports that are planned and going to be underway, but sort of in the words of the late Mayor Daley, where are their plans and programs?

Senator **Warner**. I'll defer to my distinguished colleague here from Louisiana.

Senator **Johnston**. I'm glad we have a unanimous opinion on Tenn-Tom at long last.

Mr. Bruce, you say that 96 percent of the European ports cannot handle deep draft super colliers. What percentage of the imports in Europe are handled by ports which can handle super colliers?

Mr. **Bruce**. I don't have that figure off the top of my head.

Senator **Johnston**. Isn't that the more appropriate figure?

Mr. **Bruce**. There are so many ports throughout Europe that are needing the coal for the cement industry for certain of the utility industries, I think it has to be done on a port-by-port basis.

Senator **Johnston**. Of the ports which would be conceivable importers of coal, what percentage of those are deep draft, and do you have the percentage of tonnage of those?

Mr. **Bruce**. Well the question that needs to be addressed, and it is a question, there are no answers right now, I think there are only better questions. As witnesses have come forth from various institutions suggesting that we have 55-foot deep channels to handle 160,000- to 200,000-ton colliers for the future, those kind of facilities are not really in existence today in Europe either. And what I'm suggesting is there is perhaps an optimum, maybe it is 150,000, 160,000. Let's find out by really studying.

Senator **Johnston**. Rotterdam can handle 55 feet and 200,000 dead weight tons?

Mr. **Bruce**. But that's only one port.

Senator **Johnston** But that's the largest port in the world, isn't it?

Mr. BRUCE. But that's only going to serve the needs of Rotterdam. What about all of the other needs throughout Europe?

Senator JOHNSTON. You've got railroads in Europe that can handle——

Mr. BRUCE. But that's going to add tremendously to the total distribution cost or the total cost of land and Btu's. Spain doesn't want to pay that kind of a premium. The throwaway remark that is made that you can save $5 to $6 a ton on a large collier versus today's size ship is not supported by a great amount of fact. I haven't seen the homework. The Platou organization from Norway has done some studies. Now we don't want to rely on that either. That's why we're turning this over to the Massachusetts Institute of Technology to really define the issue.

Senator WARNER. What is the date of that report? It could be very helpful.

Mr. BRUCE. The information that I have on that is in the form of slides that a colleague from the coal industry found whan he was in Oslo and asked that organization to come to Sohio to put on the program. And it was about 6 months ago.

Senator WARNER. What is the date of the Sloan report?

Mr. BRUCE. I've just commissioned the study. It's 6 months out.

Senator JOHNSTON. Mr. Bruce, if you ship out of the Port of New Orleans, how much of the cost is rail shipment to that port as opposed to shipping out of one of our other ports?

Surely you have that figure.

Mr. BRUCE. The Illinois Basin is a situation in terms of coal development that is just getting off the ground. The numbers are not of the magnitude that we find here on the east coast. But it's going to come because with the development of the Hunt Resources terminal at Baton Rouge which has just recently been announced, that's going to be a $15 million through port facility. They will be able to bring in Appalachian coal by barge and Illinois Basin coal either by barge or by railroad. In fact we're going to perhaps frustrate the Corps of Engineers a little bit because we have put together the most cost effective transportation from the Illinois basin coal fields to the ships.

Senator JOHNSTON. I know, but while you say you're for the deep draft in the port of New Orleans, I must say I'm not convinced, particularly when you come up with statements like you don't need 55 feet, 96 percent of the ports can't handle it, and those other statements.

Mr. BRUCE. I didn't say that. I want to make it clear. I said questions need to be raised. We have supported it, but based on certain additional findings, and one must continue research. What is the optimum?

Senator JOHNSTON. I hear very well, but it is very clear that is not support. In other words, you have selected your facts and figures and asked the questions that tend to show opposition, and that's all right. I do not require you to come in here and support it. But let's be clear about what position we're taking.

What I really want to know is, and in my own mind I'm trying to figure out, is why you should not be for it. It must be because the railroads have more rail mileage by shipping to the port of Hampton Roads or any one of a number of other ports other than down the Mississippi River by barge. And what I'm getting at is how much of your shipment when you go through the port of New Orleans, is through railroad, because I know railroads are very important in getting the coal out of the basins and to the river point.

Mr. BRUCE. It's very small right now, because as I said the market for Illinois basin coal has just started to develop. We'll do 150,000 tons this year for export. Next year I would see this being upwards of 800,000 tons. We're going to grow this and by 1984 I'm projecting we will be transporting by rail, most cost effective, as opposed to barge. The conventional wisdom is everything has to go barge, but we've proven that is not the case. We'll be doing 5 million tons of coal by 1984 through the port of New Orleans area.

Senator JOHNSTON. Let me say that you say more study needs to be done in these markets; I personally have talked to the Austrians, the Finns, the head of the French coal company, the Germans, I think there is one more that I personally have talked to—The Netherlands. Their questions to me are, are you going to get a 55-foot channel? I thought we were. My answer now will not be so encouraging, because first of all you've got the traditional jealousy among the ports. No port wants another one to get deeper draft than it's got. Questions are raised by the railroads. Questions are raised by Stockman's shop about whether or not the traditional role of the corps or if the budget can stand any money. And there is a lack of support from this administration. I must say I'm not too encouraged. I think it is rather distressing because each of these foreign coal importers tell me they have a huge market out there, and that they want to import American coal. But in order for it to be cost effective you've got to have a 55-foot channel. That they have a choice now between Australia, South Africa, both of which have 55-foot-deep draft channels, or maybe even Poland if you want to count on their political solidarity there.

But they are going to be making choices soon as to long-term supplies of coal, or conversely to the Soviet gas. I fear that by our diddling around in this country we're not going to just delay for a few more years the development of great coal markets, but we're going to lose and perhaps lose them altogether and that is what concerns me. I hope the railroads will look at that question as well and realize that there is not just a zero sum game. It's not inevitable that this coal be shipped in large quantities to these countries.

I hope you will look at that.

Let me say one more thing about my favorite subject of Tenn-Tom, and I see my old friend Bill Dempsey out there. I know he is a supporter of Tenn-Tom, but I wasn't here when Tenn-Tom was brought up or authorized. It is in conflict with my own port of New Orleans, or in competition with it should I say. Some would say it is in great competition. I don't know how much. Probably not that much. But it's my duty to defend it as chairman of the committee once the committee made the judgment.

I must say I think the judgment is quite clear at this point and I don't mean to overstate the case, but I don't see that reasonable minds can differ on that subject. Now people in the public can and and some of our friends of the news media who are not really informed can. But of those who are informed and can see how far into that project we are, how can anyone say when you're 81-percent committed, and that's the figure whether it's 81 or 80 or 79 or 82, and the savings is only 19 percent, how can anybody say that you really ought to stop that?

If it should have been stopped it should have been stopped ab initio or in early stages, and had that been the question I might not have offered my voice in protest. I don't know what I would have done at that time, but it was not a clear question certainly at that time. Or maybe it was clear in your direction, I don't know.

But at this point, gentlemen, frankly, I'm not afraid of losing that fight, not at this point. You might want it one year and then stop it and then some othere administration will come in, or this administration will change its mind. That project is going to be finished.

What we need to do is pull together. I mean all the transportation elements toward more common goals.

I hate to see myself in opposition with railroads because of Tenn-Tom. That shouldn't be. That's a clear question, and I hope having Lost it this year you will recognize that fact and let's move on to something we can work together on. I hope we can do that because as I say, I think that one's clear. And one of the good projects we could work together on would be a 55-foot channel for our coal exporting.

Thank you.

Senator WARNER. Mr. Ford?

Senator FORD. After hearing that on Tenn-Tom I pass, Mr. Chairman.

Senator WARNER. We do need to expedite things, although it's a good testimony with healthy discussion.

[Subsequent to the hearing Mr. Bruce submitted the following:]

Illinois
Central
Gulf

An IC Industries Company

Harry J. Bruce
Senior Vice President
Marketing

Illinois Central
Gulf Railroad
Two Illinois Center
233 North Michigan Avenue
Chicago, IL 60601-5799
(312) 565 1600

December 8, 1981

The Honorable Bennett Johnston
U.S. Senate
Washington, DC 20510

Dear Senator Johnston:

I appreciated the opportunity to appear before Senator Warner's Committee December 3. However, I left with the feeling that my position on one point was not clear. Let me sharpen the focus of my testimony regarding dredging channels to 55 feet.

In no way should it be interpreted that I am opposed to deepening our various port channels. Our research has led us to question the magnitude of dredging required in order to meet the coal trade challenge. We believe that the M.I.T. studies, funded by ICG, will produce definitive insight and suggest optimum channel depths. If the findings support the 55-foot level, we will know that the position is based in fact rather than on unsubstantiated opinion.

On the other hand, if we invest the large sums for such dredging only to learn through practical experience that a level less than 55 feet was optimum, the mistake would be sad. Not only would it be sad for the taxpayers, but equally unfortunate for those responsible for paying the user charges on the excess capacity.

Our deep interest in all facets of the international coal trade may cause a certain amount of suspicion: "What's in it for the ICG?" On this matter, we are completely open. We are motivated by our interest in the success of Illinois Basin coal in the international marketplace and U.S. leadership in coal trade. User charges at the port of exit are not an item we will ever likely be forced to bear.

Sincerely,

bcc: Ms. C. Rochford
Mr. William Dempsey
Mr. R. J. Neubauer
Mr. Ned Reed
Mr. Roger Sindelar
Mr. Hal Smith
Mr. William Strauss
Mr. Sam Watkins
Col. Herbert H. Haar
Prof. Mel Horwitch
Senator Warner
Mr. J. Lovejoy
Ms. J. Tremulis
Mr. Joel Price

Illinois
Central
Gulf

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December 8, 1981

The Honorable Charles Percy
U.S. Senate
Washington, DC 20510

Dear Senator Percy:

I testified before Senator Warner's Energy Subcommittee on December 3, and wanted to share with you a copy of my remarks. Your good friend and distinguished colleague Senator Johnston did not seem too pleased with my remarks on the matter of channel dredging. In fact, he may have misunderstood my intent.

As you will note in my testimony, the basic question is how deep channels should be, given practical evidence of world-wide need. It is our view that such decisions should be based on hard facts, rather than on the opinions of a cast of witnesses from home and abroad advocating that bigger is better. Solid research is needed.

I would hope that our approach appeals to your sense of logic. Dredging is a subject involving billions of dollars. As you well know, investment decisions of much lesser magnitude would not be approved in the private sector before passing careful scrutiny. Therefore, I have commissioned a study with M.I.T., funded by the ICG, to come up with definitive answers. We have no parochial axe to grind. We merely wish to determine the optimum requirements for shipping channels in the long-term.

Illinois Basin coal continues to grow in importance in several international markets. Last week, ICG moved the second volume of Freeman United coal to New Orleans for shipment to Spain.

Sincerely,

ORIGINAL SIGNED
HARRY J. BRUCE

bcc: Ms. C. Rochford
Mr. William Dempsey
Mr. R. J. Neubauer
Mr. Ned Reed
Mr. Roger Sindelar
Mr. Hal Smith
Mr. William Strauss
Mr. Sam Watkins
Col. Herbert H. Haar
Prof. Mel Horwitch
Senator Warner
Mr. J. Lovejoy
Ms. J. Tremulis
Mr. Joel Price

Senator WARNER. We'll now have Mr. Bill Bales.

STATEMENT OF WILLIAM B. BALES, VICE PRESIDENT, COAL AND ORE TRAFFIC, NORFOLK & WESTERN RAILWAY CO., ROANOKE, VA.

Mr. BALES. Mr. Chairman, ladies and gentleman, I am pleased to have the chance to give this very brief presentation on Norfolk & Western Railway Co.'s views on domestic coal transportation.

It is a subject which has been near to our hearts for almost a century. In fact, the first shipments of NW-hauled coal moved to Norfolk from West Virginia in 1883. We will soon begin our second century of experience in moving coal.

We have survived the ups and downs of this business over the years. And there have been plenty of ups and downs. There are few certainties in railroading, but one of them is that whatever the demand for our services today, it will not be the same tomorrow. For example, Chessie and NW dumped 27 million tons of coal at Hampton Roads in 1977 and 50 million tons in 1980.

But the trend is not always up. NW actually handled more coal in 1970—90 million tons—than it has in any year since then, including what is regarded as the boom year of 1980—86 million tons. After 1970 we experienced a steady erosion in the business which has only been reversed in the past 3 years. Of course, we hope our volume will now continue upward.

It is the nature of our railroad to be able to deal with those changes in volume efficiently. We already have our right of way. We already have our heavy-duty 132-pound track structure. We already have a car manufacturing shop. On very short notice, those resources and others already on hand, can be applied to increase coal hauling capacity greatly. For example, we could increase our hopper output to 16 cars a day almost immediately if business dictated it. In point of fact, the present five-a-day production is adequate at this time, even with the heavy movements we have enjoyed since the termination of the miner's strike.

We welcome the prospect of still heavier coal movements in the future. Far from straining our capacity, it will enable us to utilize it more efficiently. Furthermore, we are willing and able to make investments which seem prudent to serve this business.

NW's ability to react to unpredictable fluctuations in the market for coal transport is exemplified by the events of the last 18 months.

A year ago there were long lines of ships waiting for coal in Hampton Roads. Using the flexibility granted by the Stagger Act, NW has entered contracts with coal shippers which both eliminate the need to stand in line for a berth, and actually increase the amount of coal we can dump at our Pier 6, in Norfolk, Va. As a result, the lines are gone while late summer and early fall have witnessed a series of record months for NW-moved export coal: 3.6 million tons in August, 3.4 million in September, and 3.7 million in October—all higher than any month in 1980.

We are consistently dumping an average of 115,000 tons a day in Norfolk, compared with 87,000 tons only a year ago in 1980.

Yesterday, there were only 7 ships in our line; a year ago yesterday there were 79—and to repeat, this is not because less coal is moving, for in fact much more is moving.

In conclusion, let me emphasize that moving coal efficiently and competitively is the way NW prospers. From criticisms that have been leveled at the railroad industry in the past, you would think we had some kind of perverse incentive to discourage the business. Of course, the reverse is true. We do well only if coal does well. Our financial incentives and our century of experience and our several billion dollar plant all dictate that we keep NW-moved coal competitive in terms of price and service. I hope we have succeeded, and I assure you we are ready and willing to move all the foreseeable tonnage.

Thank you vey much.

Senator **Warner**. Let's go back to that startling 7 versus 79 and expand on just why that situation is present.

Mr. **Bales**. I'm sure you remember at one time we had 108 in January of this year.

Senator **Warner**. All 108 called me on the phone the same day.

Mr. **Bales**. And we heard from you and your staff and numerous other people involved.

When the railroads were given the flexibility in October of last year with the Staggers Rail Act, we moved fairly rapidly after the act was signed to prepare what we called a transportation contract. These contracts provide for certain guarantees in service on the part of the railroad and also guarantee by the shipper or receiver that they will in fact do certain things with the movement of coal. We have signed a number of those contracts. The contracts provide that the ship is not required to come into the port at all until the day he is assigned to receive his cargo. And we have shipped several million tons under these contracts already this year with the first contract taking place in February. But due to the mineworkers' strike we were not able to see a full month's performance until July. And since that time we have been dumping an average of 3 million tons plus each month.

And we believe a great deal of the success has been by virtue of that contract and a special registration system that we have provided recently for some of the smaller shippers that do not meet requirements of the long-term transportation contract.

Senator **Warner**. What is the availability of those long-term contracts in small miners?

Mr. **Bales**. Well we do have a minimum guarantee on the part of the shipper or receiver that he will in fact ship so much coal during a year's time. We are open today to anyone that can meet that minimum. The minimum is 800,000 tons a year, but we have the advanced registration concept that there is no fixed minimum.

The shipper can decide what he will ship and this provision does allow the shipper or receiver to get a place in the queue so to speak without bringing his ship into port until the time that it's needed to load. And that's the reason we don't have as many vessels at the port today.

We think those features will continue to eliminate the long queues we've had over the last 12 to 18 months.

Senator **Warner**. Thank you.

Just before deferring to both colleagues, if some of you persons in the back standing want to move over to this table and relieve some of the congestion, feel free to do so.

Senator **Johnston**. Mr. Bales, do you need to deeper channel at Hampton Roads?

Mr. **Bales**. Senator, we certainly could load more coal on a number of the vessels that come into my port today. Possibly 20 percent or so of the vessels that do come in, we cannot load to their full strength. We load a vessel today to draft a 46 feet and 6 inches only on the basis that they sail at high tide. We can load over 100,000 tons on a vessel. We have loaded a number of the vessels well over 100,000 tons, the largest vessel taking 125,000 tons.

But about 20 percent or so of those vessels do leave with a light cargo. They could take 5, 10, 15, or 20,000 tons more in some cases.

Senator **Johnston**. The percentage of those that take more than 46 feet are increasing, are they not?

Mr. **Bales**. They have in recent years.

Senator **Johnston**. So you would support a deeper channel for Hampton Roads?

Mr. **Bales**. Yes, sir, and we think certainly Hampton Roads should be considered foremost due to the nature of the experience in history we've had at the port for almost 100 years.

Senator **Johnston**. I'm for it.

Thank you.

Senator **Warner**. Are you for it too, Mr. Ford?

Senator **Ford**. Anything you say, Mr. Chairman. [Laughter.]

Mr. Bales, some interesting things are happening. The statements say one thing and you read into them maybe what you want to read into them. We're getting that impression that if we don't get into the coal markets then South Africa and Australia will take over those markets and I'm not sure that's true. I think our neighbors to the north, Canada, probably will take a big bite of that and maybe the total or great part of the portion of the total.

Let me read you a statement from the hearings day before yesterday here from some of our, from our users. And one of them goes:

> It appears to us that railroads in the United States resort to freight adjustments too easily and too frequently. In 1978 inland railroad freights rose 11.3 percent. In 1979, 14.9 percent. In 1980 the increase was 14.6 percent, in the case of haulage from the Pocahontas areas.

Do you haul from Pocahontas areas?

Mr. **Bales**. Yes, sir.

Senator **Ford**. Some of my captive shippers got an increase of 22 percent, and I remember that very well, and the anguish that they went through in trying to develop the coal markets. This statement goes on to relate:

> As a consequence, rail freight rates for U.S. coals are much too high. For example, U.S. $15 per ton per 450 miles for U.S. east coast coals compares to U.S. $12.50 per ton for 700 miles for Canadian coals.

Now tell me the difference.

Mr. **Bales**. The freight rates that you mentioned are correct. The NW does move coal from the Appalachian area, and I'm sure you are familiar with that area. I think you know how difficult it is at times to get into certain areas, not only through a rail system, but a roadway system. The freight rates have increased over the years. The railroads have not been able to make a return on their investment anywhere near the other industries of this country.

Senator **Ford**. You just said your rail rate is only as good as the sale of coal. I want to remind you of that previous statement.

Mr. **Bales**. Yes, sir, and it is. The system of getting back into the coalfield areas of West Virginia, Kentucky, and those areas, has been very expensive and continues to be expensive. The situation on Canadian coals, those movements through the plains and through those areas there, I don't think they have the problems that my system has and I'm sure that my friends in the other railroads have.

I have not seen the rail rates increase to a point that the customers throughout the world have complained any more than they complain against the rail system in Canada and South Africa and other places. The foreign customers have always complained that the transportation charges are too high no matter which country they get it from, and I think this will always be the case.

We need those increases to maintain our system, the cost of rail, the cost of fuel has been high. Especially high during those years that you were quoting the increases being very large and I think that was the main reason for those increases coming about during that time.

Mr. **Dempsey**. I wonder if I might interject on this question. When the Staggers Act was being considered, some persons, quite sincerely, maintained that as soon as the railroads were given liberty there would be a rate explosion, particularly with respect to coal. Now the facts, if you look at the statistics, what we're looking at over the last year since the Staggers Act was passed, you see an average increase of 12.6 percent of coal rates, 12 percent on all other rail commodities, virtually a dead heat. More importantly it seems to me is the fact that if you can take the 12.6 percent and compare it to the two previous years before the Staggers Act was passed while we were under regulation, you will see 12.6 compared to 18 percent for the two previous years. And what that indicates to me is the truth of what we said right along and that is we live in a competitive market with respect to coal.

Coal competes with coal from one field to another. It competes with natural gas, it competes with petroleum, it competes with all the potential sources of energy. We just haven't seen those dire predictions bear fruit. They haven't done it. There still are a few people that say it has happened, but they're the Chicken Littles of the transportation industry.

We'll just rest on fact as far as coal rates are concerned.

Senator **Ford**. Let me read from the Staggers Act the definition of market dominance under existing law. It has not been altered by the Staggers Act.

Mr. **Dempsey**. But that dominance has been modified by the commission in its proposed rulemaking. I think we just have to wait and see how that works out because we really haven't had cases litigated.

What the commission has done is to say all right, we're going to consider product and geographical competition with respect to coal. Actually what that means, we don't know.

The railroads are not going to price themselves out of the coal market. As everyone here says and as you know better than anybody, our fortunes in large measure depend on the coal. It's our No. 1 commodity. We'll just have to ride with coal and we are simply not going to price it out of the market.

Senator FORD. I've always understood that when you have a captive shipper that you raise the rates just as long as the producer can stand it. I want to go back again to continue the statement of the foreign user: "As for rail rate we were very much concerned about the recent petition filed with the Interstate Commerce Commission by the NW."

And let me ask you then, Mr. Bales, the ICC currently has before it a request to deregualte the rail shipping rates of coal bound for export markets. What is the position of your railroad on this issue? Of course I know your position, but how would the deregulation of such rates improve your service in this area and allow America's coal to remain cost effective?

Mr. BALES. The international coal market has grown in such proportions that there are many areas of the world that are involved in the marketplace today that were not involved 10 years ago. Coal from the United States—Kentucky, West Virginia, and Virginia—and other areas not only competes with coals from those areas in northern West Virginia, Pennsylvania and areas like that, and Alabama and the Gulf area, but it's competing with coal throughout the world. We believe that we should be able to operate in a free enterprise system the movement, the production, the sale, and the handling of the coal, should all be free of any constraints.

The only constraint at this point that is levied against any part of that movement is a constraint on the railroad through the Commission. My company has been executing contracts with shippers and receivers. We find that the receiver and the shipper is rather reluctant in entering into a contract of a number of years because he always seems to have the ICC looking over his shoulder as well as mine. So we don't believe that either of us enter the arena in a mood to sit down and objectively negotiate a contract because the customers always believe the Commission will, possibly not now, but later on, change something in the system. We believe that should not be present.

We want to be able to compete in a free market basis and my company certainly will not price itself out of the business. Coal is too important to my company to do that, and we will not do it. And as Mr. Dempsey has said, I think what we have witnessed over the past year and what we will continue to witness will be a different attitude on pricing and services when it comes to coal and transportation as a whole.

Senator FORD. You say you have a different attitude toward pricing coal, but with deregulating the rates how will that improve your service? You didin't get into that. That is one of the things that my shippers, producers, would like to know. How are you going to improve your service?

Mr. SNOW. May I offer a thought? The whole thrust of the Staggers Act was an effort to revitalize the railroad industry so shippers could get better service. I think the underlying premise of the Staggers Act was that this industry couldn't function effectively in providing the services that its customers and shippers needed if it was in a regulatory framework. So it took some steps out of the regulatory framework. And one of the things it said is where competitive market forces operate, we want you, the railroads, to be governed by them.

Now in the export coal business you have a classic example of competitor-market forces as Senator Johnston mentioned with his reference toward all the foreign competition that we face. And his concern that unless the U.S. policy is properly adjusted, we're going to have that competition adversely affect us for the long run. It's that competition, Senator, that the NW and ourselves are trying to make sure we are prepared to meet by getting into the mainstream of the business system. Service improves as we are able to get in touch with the marketplace.

We would hope you would support it.

Senator FORD. If you're in the marketplace and you're in competition, it looks like from the figures I have the 1980 delivered cost of steam coal to Europe from South Africa is about $1.95 per million Btu's, and Australia is $2.20 per million Btu's and from the United States its $2.35 per million Btu's. On that basis if the coal is equal, it costs more to get American coal than it does the other.

Mr. SNOW. We recognize those forces you are mentioning. But let me just mention the other facts. That in 1979, you are talking steam coal there. In 1979 the Chessie system railroad systems exported 400,000 steam coal for the whole year and in 1980 they exported 10 million tons. That's a recognition on the part of the Europeans——

Senator WARNER. If we might interrupt. There is a vote on. You can continue the hearing.

Senator FORD. Go ahead.

Mr. SNOW. What I was saying, in 1980 you had reference to the rates. The demand for steam coal exploded in the United States. Our rates are competitive, we're delivering coal in Europe at rate levels which the Europeans find satisfactory or they wouldn't be buying it. It's rate levels in part dictated, in a large part dictated by world competitive conditions.

I think we're going to continue to have complaints on the part of foriegn buyers of coal, a complaint about our rates. As Mr. Bales said they complain about other countries rates. One reason they complain about our rates is that we have an Interstate Commerce Commission and it is to their advantage to complain about rates because that is an instrumentality for achieving lower rates. I think if we get the exemption you'll find the level of those complaints going down.

Senator FORD. Let me ask you this. Are you still using cars that were furnished by the shipper, or are they still using the switching engine to give some assistance, or are they doing those sort of things that they were required to do a few years ago? And when they get their car hooked in, you pay them so much a mile, but your interchange between companies are paid by day and their cars get put on the side of the track and those with other firms are moved back very quickly. Are you still using our producers in that same manner, or are they assisting you in that same manner?

Mr. **Bales**. I'll speak for the NW. The NW has few situations on our systems were we use privately owned equpment. Very few. Less than five. We are in the transportation business. We build coal hoppers at our facility, our shops in Roanoke, Va., every day. As I indicated, we build five a day now. We have the capability of building 16 a day. We haven't had that situation and I think the shippers in your State that we serve, there should not be any complaints that my company has not been able to furnish them the needed number of cars to maintain their business, both domestically and internationally. And we have taken the position that we will furnish the car. We do not eliminate the possibility that arrangements can be made, but certainly if we have it on our system we're going to move it as quickly as possible to the connection, to the destination, and return it in the manner needed to move it effectively.

Mr. **Snow**. Our answer would be very similar. We're well aware of your concern about the past complaints of car inadequacy in eastern Kentucky. We've had extended discussions with you on the record and off the record on that subject.

You prodded us to improving service and making more cars available. We too have car shops which are capable of operating at 24 cars a day. They are now operating at eight. Almost all of the equipment we provide is Chessie- or L&N-owned equipment in eastern Kentucky and the level of complaints about car service I think are at a minimum.

Our understanding from the coal department is the shippers are within the norm of what is expected, reasonably satisfied with coal car deliveries in eastern Kentucky.

Senator **Ford**. Mr. Bales says he has five or so operators like that on your lines where you're still using private cars or cars owned and used by the producer.

Mr. Snow, how many do you have?

Mr. **Snow**. I doubt that it's even five to my knowledge.

Mr. **Barber**. We have a great many shipper-owned cars moving on Conrail today. Most of them are owned by public utilities. Most of them were put into service from 5 to 8 years ago when the railroad didn't have, predecessor railroads didn't have the capacity to furnish the equipment.

We track very carefully. We track on a continuing basis the use of the private cars versus our own system cars. Recent records of the last year and a half indicate that we're using private cars, providing the utility about twice on private cars as we do on our own. We average 22 trips a year in our car and almost 40 trips a year on a private car. We are contracting for a good many of those services and the contract calls for service requirements and the furnishing of the equipment in order to protect that investment.

We have new shippers today and we have an extensive number of them that have private equipment on Conrail that have any dissatisfaction with the way that we handle their cars versus the way we're handling ours or firm cars.

Senator **Ford**. Now that you've got your picture taken I'll leave

[Whereupon, a brief recess was taken.]

Senator **Warner**. Mr. Ford will resume.

Senator **Ford**. I have a couple more questions.

Mr. Snow, you gave me an answer awhile ago about producer-owned cars. Is that for your total CSX system?

Mr. **Snow**. For the Chessie side of it. The precise number I think is like 70,000 cars, coal hopper cars, of which 400 are privately owned. They're owned by three utilities. Detroit Edison, Consumer's Commonwealth, and one other. A total of 400 out of 70,000, so that's well less than 1 percent.

On the Family Lines I don't have the precise number, but I will supply that for the record, and we may even have it before this meeting is over, but it's a higher percentage.

Senator **Ford**. I would say to you that one owner out there has twice as many cars as the "C" does. That would be approximately 800 cars. One producer has to buy——

Mr. **Snow**. I would offer an estimate. Of course the Family Lines is not, coal is not as important to the Family Lines as it is to Chessie. It's not as large a percentage of the total traffic as Family Lines. Family Lines is made up of the L&N and the Seaboard Coast Line. For the L&N it is a very high percentage.

Senator **Ford**. Something like 70 percent?

Mr. **Snow**. Thirty-five or fifty percent of total traffic.

Senator **Ford**. Well let's say 60.

Mr. **Snow**. We'll give you precise figures on that. There is approximately 35,000 open hopper cars.

Senator **Ford**. Under the L&N?

Mr. **Snow**. Under the L&N. And I'd say perhaps 2,000 privately owned cars. But I have to confirm that number and we're trying to do so.

Senator **Ford**. If you would do that I would appreciate it very much because there is a difference between 400 cars in the "C" part of it and approximately 800 cars owned by one producer under the Family Line.

I want to go back to the NW for just a minute. Your testimony indicates NW charges a different rail rate for coal shipped to American waterways systems depending on the ultimate destination of such coal. Coal for domestic use is charged at a lower rate than for coal bound for export markets. If that is true, Mr. Bales, would you explain the reasoning behind the different pricing structures?

Mr. **Bales**. There is a different rate level for coal that would be shipped to and through the river system.

Senator **Ford**. What is the difference?

Mr. **Bales**. It is higher.

Senator **Ford**. If it goes to the river system you charge a higher rate?

Mr. **Bales**. No, there is a rate to the river for movement to various utilities industries along the river system. There is a different rate if the shipment is to the river or movement through the river system to a port for export movement.

Senator **Ford**. At that point do you charge a higher rate for that to the water for export?

Mr. **Bales**. Yes we do. I think certainly it goes without a great deal of explanation. We have spent millions of dollars for a port facility to haul the coal through our system at Norfolk, Va. And we encourage the movement in that direction. The pricing of this service for the coal to move to the port——

Senator **Ford**. You charge a higher rate if it's going south?

Mr. **Bales**. We charge a higher rate if the coal actually goes into the export market.

Senator **Ford**. If you pick up coal from me and that coal is going out the port of New Orleans and it goes from Harlan or wherever, to northern Kentucky and it's put on the barge there at Maysville, for instance, and it goes south. You would charge me a higher rate for that run? Maybe that's not in your system, but you would charge me a higher rate for hauling that coal to the water because it's going to New Orleans to be shipped than you would if it goes east to go out to Hampton Roads?

Mr. **Bales**. Yes, sir. The ports that you did describe are not in my system, but if you move coal from eastern Kentucky to the river system at Cerita Canova, it would be a higher rate. But I think you would find today, Senator, if you move the coal in that direction you would again be paying a much higher rate than trying to move the coal toward Norfolk, Va. Because the charges involved are in excess to the rate charged to the port and the handling from our system in Norfolk.

The only reason that you can move through the water system is when we have the extensive, at the port, with the excessive number of vessels in the queue. We don't have that today, so it's still cheaper to move your coal through the tidewater system to Hampton Roads.

Senator **Ford**. How much more expense do you go to to get it to the water for export than it is to get to the water for domestic use?

Mr. **Bales**. It goes to no extra expense.

Senator **Ford**. So you make a larger profit off the coal we're trying to expand the foreign market in?

Mr. **Bales**. I wouldn't characterize it as a larger, but there is a higher rate. The system is set up to handle the coal through the tidewater area, through Hampton Roads.

Senator **Ford**. It just goes back to the figures I read you a few moments ago of what the other countries are charging per million BTU's to get it to their foreign users compared to what we charge.

What I'm trying to get at is the expense. In trying to deregulate all your rates for export shipments of coal.

Mr. **Bales**. And there may no doubt be some change in that structure as time goes on. We've only been in the deregulation for about a year. As I said, I think you will find a different type of strategy on the part of the railroads for marketing. We are interested in moving coal and hopefully to make a profit.

Senator **Ford**. At this rate are you encouraging coal slurry pipelines?

Mr. **Bales**. No, sir.

Senator **Ford**. As you increase your price, are you encouraging coal slurry pipelines, if you deregulate just for export? And if you charge more for waterway use? Water probably costs less that it would by rail.

Mr. **Bales**. And I think the committee would have to agree that railways have paid for the right of ways that we use; the right of ways that are being used by the barge companies are being paid by all of us in this room.

Senator **Ford**. That is not the question I asked you. I was asking about the increase of cost, regardless of how you get it there. Your right of ways were bought 100 years ago.

Mr. **Bales**. I wouldn't quite agree with that. We spend millions of dollars every year——

Senator **Ford**. That's maintenance, isn't it?

Mr. **Bales**. I don't believe my company received the land grants that you might be addressing.

Mr. **Dempsey**. I would like to say one word about this whole business of pricing. I think we shouldn't lose sight of the fact that the price of rail transportation is only one-quarter of the delivered cost of the coal and that in the last 10 years the price of coal has gone up more than five times, and the price of rail transportation only three times.

I'm not being critical of the coal companies, but the rails are a depressed industry and we're not making a fair rate of return. There are only three small railroads last year that made the 12.1-percent rate of return that the Interstate Commerce Commission considers an adequate rate of return.

Not a single major railroad in the United States has hit that rate of return. So it isn't as if we're being radical here. We're only trying to make a rate of return so that we can afford the kind of service that our customers want.

Senator **Ford**. I would want to congratulate NW because they are acquiring more Piedmont Aviation shares, so apparently they are not doing too bad.

Senator **Warner**. Thank you, your point is quite clear.

Mr. **Snow**. I have an extended statement here. I maybe would briefly highlight a couple of points on it.

STATEMENT OF JOHN W. SNOW, SENIOR VICE PRESIDENT, CORPORATE SERVICES, CSX CORP., RICHMOND, VA.

Mr. **Snow**. First of all, CSX is a new company. It was formed a little over a year ago from the merger of the Chessie system and the Family Lines railroads, and today is the largest coal-hauling railroad system in the country.

We are committed to coal. Coal is our largest single commodity, and we feel that we have the capacity to handle the demand for export coal and domestic coal which we foresee. And we foresee a growing strong market in export coal particularly related to steam.

The market really burst open in December 1979 and is continuing strong ever since except for the recent 80-day coal strike. We think it's a permanent market and we're geared up to meet it. The principal problem in serving that market is not the rail capacity problem but a short-term bottleneck at the ports. It was an understandable problem that resulted from the imbalance between demand and existing port capacity.

I'm happy to report that that imbalance has been corrected. The ports served by the CSX railroads, the ports we serve are undergoing a trebling of their coal dumping capacity. I'm referring to three major projects underway right now in Baltimore, two major projects at Newport News, the prospect for the Portsmouth project of which you are well acquainted, the projects at Wilmington and Savannah.

At the point at which those projects are completed, and that looks like something like 1983, and some will come on-stream sooner we will have tripled the coal dumping capacity on the ports served by the Chessie system railroad, so I think the problem of the long ship queue will have been a thing of the past.

It is our fond hope that the export market will continue strong enough to support this enormous increase in coal dumping capacity.

Now several things should be noted about this increased capacity. One, the new facilities will be accompanied by ground storage. This is a new development. Historically we haven't had ground storage facilities. The existence of ground storage facilities is highly beneficial. It will mean we can bring the coal cars in, dump the coal, turn the cars around and take them out rather than holding them at Newport News and Baltimore where we have had as many as 15,000 or 16,000 cars on wheels which seriously affects the utilization of railroad rolling stock capacity, so we get a benefit there.

The second major development is the fact that these new facilities are being developed by coal companies. Historically these coal export facilities were owned by the railroads. We think this is also a highly beneficial development.

The question has come up about the role of Government in stimulating the coal export market and the role they should play. Our feeling is it's a minimal role. The burgeoning development of coal export capacity in this country is testimony to the force of the private marketplace in meeting the commerce of the country. These new facilities are not being built with Federal subsidies, Federal prodding, or Federal moneys. They are being built in a private marketplace.

The role of the Government is quite limited. We see it in two areas. One, the promotion of adequate dredging and the great within reasonable time periods of the permits for environmental permits for such dredging and for the development of new coal ports and new coal facilities.

If the Government plays that role I think the private market will play its role and the United States will be able to make U.S. steam coal the alternative to OPEC oil that we all want to see it be.

Thank you.

[The prepared statement of Mr. Snow follows:]

Statement of John W. Snow
Senior Vice President - Corporate Services
CSX Corporation
To the Subcommittee on Energy and Mineral Resources
Senate Committee on Energy and Natural Resources, December 3, 1981

My name is John W. Snow. I am the Senior Vice President for Corporate Services of the CSX Corporation. I am happy to appear before your Subcommittee today to testify on the growing export market for U. S. coal.

CSX is the holding company which resulted from the merger last year of the Chessie System and the Family Lines Rail System. The major Chessie System railroads are the Chesapeake and Ohio, the Baltimore and Ohio and the Western Maryland. The major Family Lines railroads are the Seaboard Coast Line Railroad, the Louisville and Nashville Railroad and their affiliates.

The combined rail system is now the largest carrier of coal in the United States. Last year coal accounted for 30% of the transportation revenue of the combined systems, which hauled 229 million tons. Most significantly, coal export dumpings at our Chessie Tidewater facilities were nearly 33 million tons, up 61% over 1979. Although we endured a two month coal strike this year, we expect dumpings for this year at those facilities to be about 30.5 million tons. If the strike had not interrupted our operations, dumpings would have been in the neighborhood of 35 million tons or more. In addition, Chessie will handle approximately one-half million tons of coal for overseas export at its Toledo dock on Lake Erie. The Family Lines rails will add an additional 5.5 million tons of originated coal to our export total. Taken together, CSX rails will handle approximately 37 million tons of coal for the overseas trade.

The Chessie System Railroads have coal export facilities in two major port cities—Baltimore, Md., and Newport News, Va.—and the Family Lines System have announced plans for joint ventures with coal shippers to to build facilities at Savannah, Ga., and Wilmington, N. Car. In addition, the Family Lines also serve the Norfolk port area and Mobile.

So clearly the CSX railroads have a vital stake in seeing that the United States is able to serve the growing coal market overseas and ensuring that the sudden increase in demand for steam coal, which accounted for the sharp increase in exports last year, is not the boom part of another "boom and bust" cycle such as we have experienced in the past. Today I would like to discuss the efforts of the CSX railroads to expand coal exports and our views as to the appropriate role of the Federal Government in this endeavor.

Efforts of the CSX Corp. to Increase Coal Export

The current export boom began suddenly and unexpectedly in late 1979 as European countries sought relief from the stranglehold of OPEC oil.

In 1979 there were only 400,000 tons of steam coal in the 20 million tons that Chessie shipped abroad. That was only two percent of the total. Last year, in contrast, Chessie put over 10 million tons of steam coal through its ports, nearly one-third of its total exports. The turnabout stems mainly from the dwindling availability of petroleum, the common market's vulnerability to the pricing policies of OPEC and the social and political instability of other coal exporting countries such as Poland and South Africa.

We feel that this development represents a permanent market for U. S. coal. In the short term, we see the market remaining strong. This past October, was the best month ever for coal dumping on the Chessie System rails, with 3.3 million tons loaded at the Curtis Bay and Newport

News facilities. On Thanksgiving day, we had our best single day ever at Curtis Bay, with 74,500 tons. In the longer term, we expect a steady increase in total coal exports for the indefinite future. By 1985, we should be loading 45-50 million tons a year, and while longer term forecasts are speculative, we expect 65-70 million tons to be loaded by 1990 at the Tidewater facilities we serve, with even more to come from the new areas. We see the biggest part of this increase coming in the steam coal market. There will be an increasing trend toward steam coal in the world energy market. The U. S. is blessed with ample supplies of this coal and ample facilities to ship it. Even though we can expect a very competitive world market, with strong competition from Australia, South Africa, and other nations, the U. S. coal industry is proving to be the most stable and efficient source of steam coal. Both the short term and long term outlooks are very good.

The sudden and dramatic change in demand for U. S. steam coal has created serious temporary bottlenecks at our ports -- the most graphic illustration being the long ship queues at Baltimore and Hampton Roads last year. The basic problem lies in the port facilities. U. S. port capacity has been strained to the hilt by the current export situation. Over the course of the last one and a half years, however, we have take a number of steps to alleviate the problem while recognizing that the only permanent solution was additional port facilities.

An old pier, Pier 15, was brought back into service at Newport News. Except for the recent strike period, all of our export facilities have been worked to their capacity. For example, the Port Covington pier at Baltimore has been pressed into use to transfer coal from barges loaded at Curtis Bay to deep draft vessels. The Port Covington facility can handle in excess of 300,000 tons per month. These are sales that otherwise would have been lost. Already this year, we have loaded more than 2.5

million tons from the Port Covington facility. We recently introduced a registration system whereby arriving ships are given a particular reservation and then may go off and do other business. This means lower waiting costs for the ships, and thus, lower delivered prices for the coal.

When the current export steam coal boom started, the CSX railroads quickly began to examine how to increase export terminal capacity. In addition to our own studies of the potential export terminals, we hired a consultant, Soros Associates, to take a look at what could be done in the Baltimore area. At the present time, three new facilities are being planned for Baltimore.

For some time, Chessie System has been working with Island Creek Coal Company regarding a ground storage terminal for metallurgical coal. Those discussions shifted to a terminal designed primarily for steam coal. The outcome of this early work is now apparent. Island Creek's affiliate, Curtis Bay Company (CBC), has under construction a ground storage terminal within the loop of the B&O's Curtis Bay facility at Baltimore. Initially, CBC will load coal over the B&O pier. In a second stage, CBC will build a ship-loader on the old Boston Metal site next to the B&O's Curtis Bay Pier. We understand the ground storage for the CBC terminal will be operational in spring of 1983, and the pier will be operational most likely a year later.

Soros Associates and a consortium of coal companies are in the process of obtaining permits to build a terminal at Marley Neck, Baltimore, which is the largest terminal on the drawing boards. In addition, Consolidation Coal has acquired the site in the Canton area of Baltimore, and Chessie System and Conrail are working closely with Consolidation Coal in the development of that facility and the access by both railroads.

In the Hampton Roads area, Chessie is also working with A. T. Massey Coal Company in the development of a ground storage facility at

Newport News, and construction has just begun. We have been told this facility will be ready sometime in mid-1983. We are also working with a group of coal companies on the development of a second facility at Newport News know as Dominion Terminal.

At Portsmouth, Va., Family Lines are working with the state, local officials and coal companies concerning the possibility of a new coal terminal. The Family Lines Rail System has also entered into agreements with major coal shippers for new export facilities in Savannah, Ga., and Wilmington, N. Car.

It is significant to note that when all the new coal facilities which are now planned are in operation the annual export capacity of ports served by CSX railroads in the Gulf and Atlantic areas will be over 100 million tons by conservative estimate. This contrasts with total coal exports in 1980 through these ports of under 80 million tons and projected exports in 1985 of about 100 million tons, which means that capacity at CSX-served facilities will be more than adequate to handle the coal export trade. With the new facilities, the annual export capacity at Baltimore and Newport News will have nearly trebled.

The export market's shift from metallurgical coal to steam coal will also do a lot, just by itself, to speed up the flow of coal through our ports. American railroads' exporting equipment and techniques were tailored to the special requirements of steel-making coal. Metallurgical coal buyers order their coal in mixtures of certain types. As a result, when the various types of coal arrive at the N&W or C&O terminals, they must be held in the rail cars so that they can be blended as needed. Understandably, that slows the loading process and also ties up a lot of valuable railroad equipment.

The nature of coal export terminals is undergoing a radical change with the advent of these new steam coal movements. Two major developments are noteworthy, the movement to ground storage and the ownership of these new coal dumping facilities by coal companies. Historically, the railroads have provided the export piers. With ground storage this method of operation is less desirable. The railroads, as a common carrier, are not in the best position to effectively allocate adequate storage space or to operate the storage and reclaim system to the satisfaction of a large number of shippers.

The volume of coal handled by a ground storage terminal will be determined to a large extent by the marketing efforts of its users. The terminals now being planned will be owned by the coal producers or brokers. They have a great deal of control over the marketing practices, pricing and production aspects of the coal business. These are the people who are in the best position to assess the risk of such a venture, to make the necessary investments, and to benefit from greater control over the overall system.

These new terminals are going to be quite expensive. The user will have to amortize the investment as well as pay the operating costs. However, the ground storage terminal gives its user other benefits not directly related to transportation costs. This would include the marketing advantage of having coal at the port ready for shiploading and the production benefit of having a destination for the coal at which it can be stored while awaiting shipment.

The new export facilities will be extremely modern, clean and of the lastest technology. They will meet all air and water environmental standards. In another city, one of our customers is operating a similar terminal adjacent to the downtown business district. At another location, a nearly identical terminal is being built across the street from a residential area. These terminals and the export terminals being built on the East Coast will operate well and not be a problem for the surrounding communities.

These planned expansions of coal export facilities have been brought about entirely by the private sector without the need for Federal assistance or even government prodding.

Role of the Government in the Coal Export Trade

One of the issues your Committee is considering is the proper role of government in encouraging a strong coal export market for the United States and mitigating existing constraints on the development of that market. In our view, the government's responsibilities lie primarily in seeing to it that channels and harbors are dredged to appropriate depths, and that environmental permits for coal mining operations and new port facilities are not unreasonably withheld. Government can make a major contribution to the development of the United States coal export trade by facilitating the siting and permitting of new port facilities and assisting in the resolution of the contentious issues over the disposal of dredged material -- issues which invariably seem to arise in connection with dredging of channels and harbors.

It is extremely important for the government to avoid any actions such as new environmental regulations which add unreasonably to the cost of mining coal. Moreover, it is essential to avoid any action which suggests to foreign coal purchasers that the government intends to intervene in the normal marketing of coal exports. Any hint of rationing, price controls, or allocations must be avoided. Foreign coal purchasers are deeply concerned over any possibility or suggestion that the U. S. Government might interrupt readily available supplies or coal contract arrangements. The government would make a major contribution to the development of our coal export trade by giving the strongest possible assurances that it will not interfere with the performance of contracts.

Aside from channel dredging, we do not see the need for any major governmental intervention or programs. With respect to rail facilities, we foresee no major problem in financing additions to our car and locomotive fleet to meet the expanded coal export market as it materializes. As noted, the movement to ground storage facilities will free up considerable car capacity by giving us much better car utilization. This represents a net addition to our effective car fleet. As further additions are needed to meet market demands, we are confident that capital will be available.

Likewise, we see no major problem in obtaining necessary financing for any improvements in our port facilities which might be needed in response to the expanded coal export market. Capital markets normally respond quite well to profit opportunities and we see no reason why they would not do so in this case. There is need for legislation to coordinate and expedite the procedures required before one can build a port or make a major improvement. We are also intrigued by the proposals to establish a system of local cost sharing for port development projects. I can see a number of important advantages to this type of approach.

If cost sharing is established, I believe that we should not so arrange it as to have some "preferred" ports who get higher federal shares. If there is to be a different treatment as between ports, it should be based on the individual port's willingness to dig deeper into its own pocket to build for the future. Ports that are willing to dig deeper should get a higher priority.

Our real goal in this area should be 100 per cent local funding. This may not be possible and one alternative may be a system that would require at least 50 per cent local funding, with the priority of construction determined by a community's willingnees to increase their contribution to levels above that mark.

The Role of the United States in the Emerging International Coal Market

The growth of the coal export market presents a great opportunity for the United States. It will provide jobs in the mines and on the railroads and in their related supply industries. It will strengthen the balance of payments significantly. The additional foreign currency it produces will improve the dollar's standing in the world currency markets. I am confident that the current situation is not a brief bubble but rather represents a long-term fundamental shift in the market for U. S. coal. We need to make the most of it.

There is no doubt in my mind that we have the capacity to be competitive in the world coal market and to capture a large share of it. The United States has ample coal reserves and in particular we have the kind of coal which the Europeans and Japanese find most attractive. We have highly developed, modern coal mining technology, an able and experienced labor force, and a highly competitive coal industry.

Our transport system is certainly up to the task. As the coal market expands, we can add needed additional rail transport capacity readily. In fact, it takes us far less time to do so than it does to put new mining capacity into operation. The needed additions to our port facilities are already well underway including the development of ground storage and loading facilities. If the situation warrants, the channels can be deepened to 55 feet to accommodate larger colliers or we could establish off-shore facilities for the huge ships. Thus, from a technical capacity point of view, the United States should be a major factor in the emerging coal export business.

The major negative factor I see is our national penchant for excessive environmental restrictions which add so enormously to the cost of producing coal. We need to take the steps necessary to assure a reasonable, sensible, cost-effective approach to the environmental issues associated with mining, transporting, using and storing coal. Let me emphasize again that from the point of view of the coal transportation system, I do not foresee any significant problems in adjusting capacity to meet coal export requirements.

I appreciate the opportunity to testify today. Our perspective on the coal export picture is that of a major coal transporter who has a vital stake in coal and coal exports. We are convinced that the surge in United States coal exports which we have seen in the last year is not a temporary phenomenon but rather represents a fundamental, long-term development.

It is a development which is critically important to the world community at large as coal represents the only clear alternative to continuing dependence on an unstable oil cartel. At the same time this development represents a major potential benefit to the United States. We at CSX intend to do everything possible within our power to make sure that we realize that potential. Speaking from a transportation perspective, I can assure you that we will have in place ample capacity to handle any foreseeable coal export problems. Moreover, as I have indicated, the port facilities bottleneck will be overcome in the next several years. The United States will then stand in a position to participate fully in the burgeoning coal market and take advantage of the opportunity which it offers. I am confident that if we all act together -- the coal industry, the rail industry, and the government -- we will be able to make American coal the powerful rival of OPEC oil which it should be.

Thank you. I would be pleased to address any questions which you may have.

Senator WARNER. Mr. Graves.

STATEMENT OF THOMAS B. GRAVES, VICE PRESIDENT, FINANCE AND ADMINISTRATION, UNION PACIFIC RAILROAD, CO., OMAHA, NEBR.

Mr. GRAVES. Mr. Chairman and distinguished members of the Energy and Mineral Resources Subcommittee.

On behalf of the Union Pacific I want to thank you for allowing me to comment on western coal, and western coal transportation specifically as impacts the export situation.

I have submitted to the committee a more detailed statement and I will now summarize the points that I have made in that.

Our discussion of America's present and future participation in the coal export sweepstakes would be incomplete without due consideration being given to the role of western coal. Not only is the export of coal from the Western United States a reality today, but the prospect of significant increases in export traffic from the West promises to be of vital concern to all Americans in the years to come. I think it's appropriate that the Union Pacific railroad be invited to appear because we have already gained some experience in the movement of export coal.

And I speak for a moment and address some remarks about the Union Pacific's present role. Headquartered in Omaha, Nebr., we serve 13 Western States on a system totaling approximately 9,500 miles of track. It's the main link in the transcontinental rail system completed in 1869. Assets include 29,000 employees, a fleet of nearly 67,000 cars, including nearly 9,000 committed to coal, 1,700 locomotives and the most technologically precise railroad operating systems in the world. Union Pacific is also America's long-haul railroad. Our average length of haul is in excess of 725 miles.

We are one of the principal railroads serving the vast coal regions of the West. Increasingly experienced in the coal handling business, and like some of my associates on the panel, coal has become our largest single commodity as of 1975.

Three major coal-producing States are on our system. Utah, Colorado, and Wyoming are served by our railroad. We serve more west coast ports than any other railroad from the major harbors of Los Angeles and Long Beach in southern California to the Pacific Northwest of Seattle, Tacoma, and Portland. So I think we are strategically located to play an important growing role in the export of western coal.

This strong strategic position is evidenced by increasing levels of coal traffic destined for Pacific rim nations. Export movements on the UP system which began as recently as 1980, have continued to grow at a steady rate. In 1980 we moved 159 unit coal trains. In 1981 we expect 600 unit coal trains which will represent nearly 5 million tons of coal, and to the export market and to Pacific rim countries. That 5-million tons now represents a significant portion of the 33-million tons of coal that the Union Pacific handles or may be handling next year.

And this has more than doubled what we did in 1975. Yet the increase has not strained the railroad's facilities or its schedules. We have made massive capital investments of equipment and modern supporting facilities and we have been prepared for successive escalations in the demand for export coal transportation.

Let's turn to the Union Pacific's future role. It's estimated that exports of coal to America's trading partners on the Pacific rim could reach as much as 200 million tons a year within 20 years. Although the levels and timing of this demand may be difficult to fix precisely, the Union Pacific remains optimistic that the basic forces underlying these projections will persist, and that Pacific rim nations will look increasingly to the U.S. coal market to provide a measure of long-term energy security.

While the U.S. will face stiff competition from other coal exporting nations, we believe that the U.S. share of the Far East market could be sizable, depending largely upon the effectiveness of our marketing effort and our ability to provide an adequate export infrastructure.

Coal from the Western United States is a logical choice to supply this U.S. share, whatever it might be. A key factor in the increased demand in U.S. coal is the reliable rail transportation system, well managed and financially strong to move this coal from Western mines to Pacific ports. Union Pacific has already begun to meet this challenge for its projected movements.

In 1980 for example, we purchased 230 new locomotives and 1,200 open-top hoppers for the movement of coal. These additions will strengthen our fleet and provide UP with its capacity to respond promptly to increasing coal demand as it materializes.

We spent nearly $1.5 billion over the past 10 years to maintain our locomotive and car fleet, track, and roadbed. In order to increase our capacity for potential coal movements through Los Angeles and Long Beach, Union Pacific has initiated over 20 major projects, construction and improvement projects on our south central district which encompasses the major coal shipping route to southern California ports, totaling $31 million in the last 18 months or so and we expect to complete those by the yearend.

We've also made improvements of coal train routes to Pacific Northwest ports and have spent $36 million in this effort. In addition we have developed an operating strategy to maximize effectiveness of the unit coal train movements. Unit trains devoted exclusively to coal handling with volumes of up to 8,500 tons per train. Despite the long distances our transit times to Pacific ports are short.

Unit trains operate on predetermined schedules, stopping only long enough to change crews and take on fuel. As an example, an 80-car train in central Utah has a round trip of 96 hours, a 4-day turnaround cycle for this equipment, over 1,450 miles to the Port of Los Angeles from central Utah, or the port of Long Beach. Planning and scheduling have contributed greatly toward the maximum equipment utilization and energy conservation.

We are already moving a sizable volume of export coal through west coast ports and have developed the operating capacity and strategy to handle these and future movements.

Here I'd like to take a couple of moments to further comment about our transportation system. As a railroad we have direct access to both major coal sources and export ports and we have the advantages of inherent flexibility. Such flexibility will enable domestic coal producers or foreign purchasers to move coal through various ports, depending upon supply and demand factors, availability of ocean carrier capacity, and the ultimate destination.

Let's look at the total coal chain as it is in the West. Notwithstanding this flexibility to which I referred and our ability to access various production areas, we must rely on ocean shipping and effective transloading to complete the transportation cycle. We therefore, naturally, are concerned about any potential port congestion.

If the railroad-related economies are going to be passed on to foreign purchasers as a potential inducement to commit the U.S. coal supplies, it will be critically important that the unit trains moving from the western coalfields be able to move in a continuous cycle without having to contend with unloading delays at the ports.

Private industry to date has been hesitant to construct new port facilities in the West because no longterm contracts for export of western U.S. coal have been signed. At the same time, far East customers are apparently hesitant to make long-term commitments until major export facilities are built. We, therefore, believe that if the United States is to be come a major exporter of coal to the Far East, it must take the first step and develop the necessary port infrastructure. We also feel that an aggressive position by the Federal Government will stimulate necessary capital investment in new terminals.

To be clear, we feel that the proper role of the Federal Government is not to subsidize coal exports, but to expedite them.

At the other end of the coal chain, coal production capacity is a concern. In many cases mining capacity constraints are related to the Federal Government's coal management program. In the West, the Federal Government directly owns and controls about 80 percent of all coalfields. Thus, the ability to increase western production is directly dependent upon Federal coal availability. Up to now the coal demand projections and leasing targets have not adequately considered the potential for export coals; therefore it is possible that insufficient amounts of coal land will be leased to meet both the domestic and export demand by 1990 and beyond.

The leadtime needed to bring a new coal mine into production is long. In the West, commonly 6 to 10 years. Preparations must be initiated now to meet the expected demand of the late 1980's.

Regulatory constraints will affect the overall effort to develop export coal capacity. Proposals to expand or to construct new port facilities, as well as to expand rail plants and increase service levels, are often hampered by the need to comply with environmental and land-use regulations. Conflicts between these goals and the objective to increase both domestic use and export of U.S. steam coal must be resolved.

Clarification and rationalization of environmental issues is especially critical in situations where the environmental review of proposed port expansion or new construction is protracted by State and local review processes.

With the current trend toward a reduction in environmentally related budgets and staffing at the Federal level, we face the possibility that the formulation and/or enforcement of environmental standards will be relinquished to either State, regional, or local governments. To the extent this trend is allowed to adversely affect the operation of interstate rail carriers, the results could be disastrous as to the strengthening of our export capacity.

While many of the obstacles and concerns are complex as I have outlined and difficult to contend with, they are by no means insurmountable. It is hoped that both Congress and the Reagan administration will continue to favor the rationalization of Federal regulations and policies in the interest of expediting full-scale coal development and expansion. We must continue to reaffirm and clarify U.S. energy policy and the importance of reducing our reliance on imported oil.

The ongoing rationalization of the railroad industry, prompted in part by changing Government attitudes toward railroads, and hopefully facilitated by recently enacted railroad deregulation legislation, will contribute to the maintenance of a sound transportation infrastructure that will meet both increasing domestic and export coal demand.

Combined with the added efficiencies gained through rail industry rationalization, rail deregulation further brightens the picture. The most dramatic and immediate impact of the Staggers Rail Act of 1980 will be in the area of rates. Opportunities for pricing initiatives, including contract ratemaking, will have a positive and long-term effect on the viability and profitability of the entire industry.

Increasing American participation in world resource trade markets is a critical factor in restoring our Nation's economic health. The administration's coal export policy, recently released by Commerce Secretary Baldrige, has carefully identified the benefits to our national economy of expanded coal exports.

The Union Pacific is ready and capable of meeting its part in this interesting challenge.

Again, I thank you for allowing the Union Pacific to participate and address this issue, and we appreciate the invitation to participate in today's coal export hearing. We sincerely hope that we have firmly indicated the UP's willingness and ability to play a positive role in this market.

Thank you.

[The prepared statement of Mr. Graves follows:]

TESTIMONY
OF
THOMAS B. GRAVES, JR.
VICE PRESIDENT-FINANCE AND ADMINISTRATION DEPARTMENT
UNION PACIFIC RAILROAD COMPANY
SENATE ENERGY AND MINERAL RESOURCES
SUBCOMMITTEE
WASHINGTON, D.C.
DECEMBER 3, 1981

Mr. Chairman and distinguished members of the Energy and Mineral Resources Subcommittee.

Good morning. My name is Thomas B. Graves, Jr., and I am Vice-President, Finance and Administration for the Union Pacific Railroad Company. On behalf of Union Pacific, thank you for allowing us to comment on the topic of Western coal transportation, specifically, as this relates to the export situation.

Certainly, any discussion of America's present and future participation in the coal export sweepstakes would be incomplete without due consideration being given to the role of Western coal. Not only is the export of coal from the Western United States a reality today, but the prospect of significant increases in export traffic from the West promises to be of vital concern to all Americans in the years to come. It is also appropriate that Union Pacific Railroad be invited to appear before you to address these matters since we have already gained some experience in the movement of export coal.

Union Pacific's Present Role

Union Pacific, headquartered in Omaha, Nebraska. serves 13 Western states on a system totaling 9,475 miles of track. It is the main link in the transcontinental rail system completed in 1869—a railroad steeped in the history and tradition of the pioneer West. Assets of Union Pacific include nearly 29,000 employees, a fleet of nearly 67,000 cars and 1,725 locomotives, and one of the most technologically precise railroad operating systems in the world. Union Pacific is also America's long-haul railroad, with over 100 years' experience in transporting bulk commodities in large volume over long distances. Its average length of haul is 725 miles.

As one of the principal railroads serving the vast coal regions of Western America, Union Pacific has become increasingly experienced in the coal-handling business. In fact, since 1975, coal has been the largest single commodity the Railroad handles.

Three major coal-producing states—Utah, Colorado, and Wyoming—are served directly by Union Pacific, and through connections with other railroads, Union Pacific reaches all of the major coal regions of the West. Complementing this coal field access and enhancing its potential as a transporter of export coal is the fact that Union Pacific serves more West Coast ports than any other railroad, all along the seaboard from the major harbors of Los Angeles and Long Beach in southern California to such ports as Seattle, Portland and Tacoma in the Pacific Northwest. Thus, Union Pacific is strategically situated to play an important and growing role in the export of Western coal.

This strong strategic position is evidenced by the increasing levels of export coal traffic destined for Pacific Rim nations. Export movements over the UP system, which began as recently as the spring of 1980, have continued to grow at a steady rate. In 1980, Union Pacific unloaded 159 unit coal trains at export harbors in the West. The number is expected to reach 600 in 1981. Union Pacific's 1981 coal deliveries to Pacific Coast ports for shipment abroad are expected to total 4.5 to 4.8 million short tons.

To summarize our recent performance, coal tonnage transported for domestic as well as export markets has increased from 14.0 million short tons in 1975 to 28.0 million short tons in 1980. It is projected that this tonnage will climb to almost 32.9 million short tons by the end of this year.

Union Pacific
Coal Transportation
(millions of short tons)

1975	14.0
1976	17.2
1977	20.2
1978	23.0
1979	23.7
1980	28.0
1981 (projected)	32.9

Even though Union Pacific's coal tonnage has more than doubled since 1975, the increase has not strained the Railroad's facilities or schedules. Through massive capital investments in track and equipment and modern supporting facilities, Union Pacific has been prepared for successive escalations of demand for coal transportation.

Union Pacific's Future Role

It has been estimated that exports of coal to America's trading partners on the Pacific Rim could reach nearly 200 million short tons a year within 20 years. Although the levels and timing of this future demand may be difficult to fix precisely, Union Pacific remains optimistic that the basic forces underlying these projections will persist, and that Pacific Rim nations will look increasingly to coal to provide a measure of long-term energy security. And, while the U.S. will face stiff competition from other coal exporting nations, we believe that the U.S. share of the Far East market could be sizeable, depending largely upon the effectiveness of our marketing effort and our ability to provide an adequate export infrastructure.

Coal from the Western U.S. is a logical choice to supply this U.S. share whatever it might be. There are several Western fields in competition, but those fields accessed by Union Pacific (either directly or through interchange) appear to have a competitive edge based on their location and the quality of their reserves—both of which will have a favorable impact on their relative price competitiveness. Quality, of course, is a vital consideration. Far Eastern consumers in general are looking for low-sulfur, low-ash coal with a heating content of 11,000 Btu's or higher. These specifications limit the potential for most Western coals, particularly the enormous reserves of subbituminous and lignite which are found in northeastern Wyoming, Montana, and North Dakota. Location is also important since Western coals are found at least seven-hundred miles inland, and land transportation costs will be an important element of the overall delivered costs.

Preparing to Meet the Challenge

A key factor in meeting increased demand for U.S. coal is a reliable rail transportation system, well-managed and financially strong, to move this coal from Western mines to Pacific ports. For this reason, as the movement of coal for export to Pacific Rim nations becomes an ever-more significant part of the railroads' business, capital investments and technological improvements must be made to assure a continuing ability to handle increasing volumes. Union Pacific has already begun to meet this challenge for its projected movements.

In 1980, for example, Union Pacific purchased 230 new locomotives and 1,200 open-top hoppers. These additions will strengthen our fleet and provide U.P. with the capacity to respond promptly to increasing coal demand as it materializes.

Union Pacific has also spent nearly $1.5 billion over the past 10 years to maintain its locomotive and car fleet, track, and roadbed. A typical annual maintenance program includes the laying of over 300 miles of new rail, replacing approximately 850,000 crossties, and resurfacing and lining 1,400 miles of main line track.

In order to increase our rail capacity for potential coal movements through the Los Angeles and Long Beach harbors, Union Pacific has initiated 22 major construction and improvement projects on our South Central District which encompasses the major coal shipping route to southern California ports. These improvements, totaling $31 million, include track relocation, extensions of sidings, bridges, signaling, and a new classification yard. They will expedite train movement and are expected to be completed by year-end.

We have also made improvements to coal train routes to Pacific Northwest ports totaling $36 million. They include several line changes, siding extensions, Centralized Traffic Control (CTC) installation, and a major classification yard at Hinkle, Oregon. We are also engaged in making a major line change in the Blue Mountains in eastern Oregon to expedite train movements and increase capacity at a cost of $4.2 million.

In addition, we have developed an operating strategy to maximize the effectiveness of our unit coal train movements. Unit trains devoted exclusively to coal handle volumes of up to 8,500 short tons per train. The number of cars and tonnage handled by a unit coal train depends on customer requirements and terrain to be traversed, but in the past has averaged between 75 and 85 cars for West Coast ports.

Where we originate coal shipments, Union Pacific participates in loading coal trains in an expedited manner. Instead of being stopped individually to be loaded, coal cars are pulled slowly past the coal tipple and are loaded as they pass, saving valuable time and energy. Its destination port already has been established, its transit time and schedule have been set, and Union Pacific's highly automated movement control system has been prepared to take the train under its supervision for the duration of its journey.

Despite the long distances, coal trains' transit times to Pacific ports on Union Pacific routes are short. Unit coal trains operate on predetermined schedules, stopping only long enough to change crews and take on fuel. For example, a typical 80-car unit coal train loading at the origin site of Sharp, Utah has a round-trip time of only 96 hours over the 1,445 miles to the Port of Los Angeles or Port of Long Beach. Each loaded coal train arrives at the port for unloading at a preselected time and is usually unloaded in eight hours or less depending upon the capability of the coal handling facility. Again, planning and scheduling contribute greatly toward maximum equipment utilization and energy conservation.

In summary, we are already moving a considerable volume of export coal through West Coast ports, have developed the operating capacity and strategy to handle these and future movements, and are prepared to make the necessary capital investments to meet future needs.

Here I would like to make a further comment about our transportation system. As a railroad with direct access to both major coal sources and export ports, we enjoy the advantage of inherent flexibility. Such flexibility for example, will enable domestic coal producers or foreign purchasers to move coal through various ports, depending upon supply and demand factors, the availability of ocean carrier capacity, and ultimate destination. In the case of Union Pacific, assuming the consummation of our proposed mergers with the Missouri Pacific and the Western Pacific, we will not only be able to serve ports up and down the West Coast, but also Brownsville, Corpus Christi, Galveston, Houston, and New Orleans on the Gulf Coast. In addition, we will have single-system service from the coal fields of Wyoming, Utah, and Colorado to Mississippi River barge connections.

Looking at the Total Coal Chain

Notwithstanding this flexibility and our ability to access various production areas, we must rely on ocean shipping and effective transloading to complete the transportation cycle. We are, therefore, naturally concerned about any potential port congestion or basic transloading problems which threaten to destroy the integrity of unit train movements. If these railroad-related economies are to be passed on to foreign purchasers as a potential inducement to commit to U.S. coal supplies, it will be critically important that unit trains moving from Western coal fields be able to move in a continuous cycle without having to contend with unloading delays at the ports.

In some instances, existing port capacity is frequently congested as a result of other export activity. Additional investment will therefore be required to provide both coal unloading facilities and additional railroad support facilities such as yards and receiving tracks. In many port locations, there are as yet no transloading facilities capable of handling export coal volumes. Here, new coal facilities may be required.

Private industry has been hesitant to construct new port facilities in the West because no long-term contracts for exports of Western U.S. coal have been signed. At the same time, Far Eastern consumers are apparently hesitant to make long-term commitments until major coal export facilities are built. We therefore believe that if the U.S. is to become a major exporter of coal to the Far East, it must take the first step and develop the necessary port infrastructure. We also feel that an aggressive position by the Federal government (as example a Federal tax incentive for private investment in port facilities) will stimulate necessary capital investment in new terminals.

To be clear, we feel that the proper role of the Federal government is not to subsidize coal exports, but to expedite them. By linking port improvement to commercial demand rather than budgetary or political processes and constraints, expanded international trade participation can proceed on a strong and rational basis.

In supporting Federal fiscal incentives, we do not distinguish between new coal terminal construction or expansion of existing facilities. Several such proposals have been advanced by the ports which we serve. We believe that the eventual success or failure of each of these ventures will and should be based primarily on economic considerations, and that the eventual pattern of exports will be the result of business decisions between shippers and receivers. Union Pacific stands ready to cooperate with each port which may request its assistance as it progresses its respective development plans.

At the other end of the coal chain, coal production capacity is of further concern. In many cases, mining capacity constraints are related to the Federal government's coal management program. In the West, the Federal government directly owns or controls, through land ownership patterns, about 80 percent of all coal lands. Thus, the ability to increase Western production is directly dependent upon Federal coal availability. Under the existing Federal coal leasing program, coal lease sales are scheduled periodically in each of the Department of Interior's coal regions. The amount of coal to be offered for lease at each sale is determined by a leasing target based on the projected demand for coal from the region, less planned production not dependent on new Federal leases. Up to now, the coal demand projections and leasing targets have not adequately considered the potential for export coals; therefore, it is possible that insufficient amounts of coal land will be leased to meet the demand for 1990 and beyond.

The lead time needed to bring a new coal mine into production is long in the Western U.S.—commonly six to ten years. Thus, preparations must be initiated now to meet the expected demand for coal for domestic and export needs of 1987 to 1990.

Although the level of demand is, to some extent, uncertain, it is critical to mobilize quickly so that coal mines can be planned, sited, and permitted by 1990, and to ensure that time is available to carefully select the most economically mineable reserve and the most environmentally acceptable areas for development. This mobilization should involve both the leasing of adequate Federal coal reserves, and the expediting of the mine permitting process.

Environmental Issues to Consider

Regulatory constraints will affect the overall effort to develop export coal capacity. Proposals to expand or to construct new port facilities, as well as to expand rail plants and increase service levels, are often hampered by the need to comply with environmental and land use regulations. At the same time, however, environmental causes and concerns continue to receive high priority from the government and the public. Conflicts between these goals and the objective to increase both the domestic use and export of U.S. steam coal must be resolved. Clarification and rationalization of environmental issues is especially critical in situations where the environmental review of proposed port expansion or new construction is protracted by state and local review processes. Further definition is also needed in many cases where state and local regulations and policies are not internally consistent or totally in agreement with Federal guidelines.

With the current trend toward a reduction in environmentally related budgets and staffing at the Federal level, we face the possibility that the formulation and/or enforcement of environmental standards will be relinquished to either state, regional, or local governments. In the case of air quality, this has already happened. To the extent that this trend is allowed to adversely effect the operations of interstate rail carriers, the results could be disastrous to the strengthening of our export capacity. While the state and local groups certainly have a vested interest in these matters, and should play a significant role in the decision-making process, there is a chance that the broader national objectives may be stymied by more narrow interests.

The possibility that state and local communities will overreact to the prospect of additional coal export traffic is very real. Of late, the news media have tended to greatly exaggerate both projected traffic levels and the effects of these incremental export movements. To put the situation in perspective, an annual increase of even 10 million tons of export coal through a given port would only result in the addition of about three unit trains each day in each direction. In most instances, given existing traffic volumes to port areas, this incremental traffic would amount to a relatively small percentage increase, perhaps no more substantial than might be experienced in a given day with normal traffic fluctuations.

Resolution of these problems will be important to the orderly and reliable flow of coal to export markets, and could have a potentially significant economic impact on the costs of inland transportation and transloading. In this sense, local environmental restrictions will be a significant factor in determining whether U.S. steam coal can be priced competitively in the world market and what quantities of U.S. coal can be transported for export.

Additional Issues for Consideration

While many of the obstacles and concerns are complex and difficult to contend with, they are by no means insurmountable. Overcoming many of the problems associated with the development of export coal markets could be facilitated by a decisive response on the part of the Federal government. Yes, specific actions must be taken to overcome these impediments. Of substantial importance is the need for a public awareness of the evolving role of the U.S. as a leader in coal production, coal exports, and energy self-sufficiency.

It is hoped that both the Congress and the Reagan Administration will foster this attitude and continue to favor the rationalization of Federal regulations and policies in the interest of expediting full-scale coal development and expansion. We must continue to reaffirm and clarify U.S. energy policy and the importance of reducing our reliance on imported oil. This clarification should include strong programs which lead to decreased oil consumption and specific limitations on the use of oil and gas in utility and industrial boilers. We must also stress the importance of coal exports in helping our allies reduce their dependence on foreign oil and in improving U.S. balance of payments.

The ongoing rationalization of the railroad industry, prompted in part by changing government attitudes toward railroads, and hopefully facilitated by recently enacted railroad deregulation legislation, will contribute to the maintenance of a sound transportation infrastructure that will meet both increasing domestic and export coal demand. Recent efforts to strengthen the industry are best exemplified by the well-publicized merger movement. Railroad systems with the capabilty of providing single-system service such as the Burlington Northern-Frisco, CSX, Union Pacific-Missouri Pacific-Western Pacific, and Norfolk and Western-Southern will provide extreme service flexibility to coal producers and purchasers, both domestically and abroad. Many of these systems will be able to provide single-line service from coal producing regions directly to ports.

Combined with the added efficiencies gained through rail industry rationalization, rail deregulation further brightens the picture. The most dramatic and immediate impact of the Staggers Rail Act of 1980 will likely be in the area of rates. Opportunities for pricing initiatives, including contract ratemaking, will have a positive and long-term effect on the viability and profitability of the entire industry. In turn, increased levels of profitability will bring improved financial health and the ability to respond appropriately to the capital demands of exporting coal.

In this regard, I believe it is important to recognize the order of magnitude of capital investment involved to meet projected export demand. Given an adequate level of revenues, a potential cushioning against the risk of interruption in foreign markets and sufficient lead time, I have no doubt that the rail industry on an overall basis has the capability of making the necessary investments to handle this business. On the other hand, the industry's depressed level of current earnings (which will hopefully be improved through meaningful deregulation), the need to replenish capital and plant which has been depleted through decades of depressed earnings, and the prospect of demand for substantial increases of export coal in the near term, may require that additional capital be made readily available to allow railroads to increase capacity and to respond quickly to projected export demand. Appropriate tax incentives to encourage rail and third-party investment may be a partial solution to this problem. As an example, were Congress to extend the ten percent energy investment tax credit to the railroad industry, this would lend support to the industry's ongoing investment program.

I also believe that the subcommittee should carefully consider government policy with respect to export coal generally, and particularly the need for some consistency and dependability. For example, I am concerned about the prospect that coal export policy could be used as a political tool in foreign policy in an effort to orchestrate or respond to a particular international crisis. I think the recent grain embargoes provide an example of what might happen under these circumstances. To the extent that the railroad industry were called upon to underwrite additional investment to support export coal movements, whether in terms of acquiring coal cars and locomotives, investing in additional plant capacity, or in transloading facilities, the introduction of this risk element would necessarily require a higher return on this type of investment or some type of government guarantee or assurance to reduce the risk.

Increasing American participation in world resource trade markets is a critical factor in restoring our nation's economic health. The Administration's coal export policy, recently released by Commerce Secretary Baldridge, has carefully identified the substantial benefits to our national economy of expanded coal exports—creation of jobs in the coal, transportation, handling, and related industries, a favorable balance-of-payment effect, and a reduction in world-wide petroleum consumption. And yet these benefits will not be realized unless all Americans are willing to work toward that end. For our part, Union Pacific Railroad is ready and capable of meeting the challenge.

Again, thank you for allowing Union Pacific the opportunity to address this most critical issue.

Senator WARNER. We'll proceed to the next witness.

STATEMENT OF WARREN G. BARBER, ASSISTANT VICE PRESIDENT, OPEN TOP HOPPER BUSINESS GROUP, CONSOLIDATED RAIL CORPORATION, PHILADELPHIA, PA.

Mr. BARBER. My name is Warren Barber, and I'm assistant vice-president of Conrail.

In the interest of time I will highlight my remarks.

I think we've heard evidence today already about the growing demand for coal within the United States and outside of the United States. We have long been witness to this forecast and have long waited for the day that coal is going to move in the volumes that it is currently moving and is predicted to move over the next few years.

We see growth coming from two major segments in the world today. At least that impacts eastern coal. One is steam coal from Western Europe. It has been estimated that the annual demand for imported coal by these nations will more than double by 1985, to more than 90 million tons.

It is our projection and the people that we've hired to help us with forecasting, that the United States will supply 20 to 25 percent of that need of Western Europe for steam coal. We expect for 1981 it will be about 15 million tons of steam coal moved out of the United States to Europe. It was 11 million tons last year and 10 million tons in 1979. We've already heard evidence from the railroads that are moving most of that as to what it's done to the ports.

The potential for increases beyond what we have today, in our judgment lies in our ability to supply additional amounts of coal to Europe at competitive prices. Competitive prices are the delivered prices we've heard some conversation about earlier. It includes the cost of the coal at the mine. It includes the rail transportation and the water transportation.

There are reasons why coal costs a great deal to produce in the United States relative to other countries. There are reasons why the rail costs of transportation are what they are, and the water costs. We have few opportunities to reduce the total delivered cost of coal.

One of those opportunities that is available to us is the use of larger vessels which require deep water ports. Conrail subscribes to the development of deep water ports. We feel it's a requirement for U.S. coal to be competitively delivered, particularly to the European countries.

We have increasing evidence of purchasers of coal who are particularly looking toward the capacities of vessels of 100 to 150,000 dead weight tons. We know that we have the ability to fill those vessels, we must have the capacity of the ports to load the vessels.

Today we are precluded from that.

We've heard some discussion earlier concerning the number of foreign ports that can officially handle the larger super colliers. We know that all of the coal moving to Europe is not going to suddenly move in larger vessels. We have made our own analysis, and we have predicted and we have invested money on the premise there will be a great volume of coal moved in the United States in 65,000-ton-deadweight sized vessels. We have invested in concert with the Commonwealth of Pennsylvania about $35 million in Philadelphia that will be on stream next year that will allow us to triple our capacity from a little over 3 million tons a year to about 10 million tons a year.

In addition to the opportunities that we see in the export market, we also see significant opportunities for the growth of coal, from the mining of coal, movement of coal, in the domestic market.

While the domestic markets are somewhat limited when we concern ourselves with metallurgical coal in the steel industry and its outlook which is at best flat through the next several years, the conversion of industry to steam coal seems questionable at this point in time, regardless of the differential between oil and coal prices.

However the utility industry, particularly the utility industry in the East, has an opportunity to reconvert many generating stations that burned coal at one time that were forced, or took advantage of an opportunity for cheaper fuel and moved to oil. Many of these utilities have an opportunity today provided the right environmental and economic framework, to reconvert to coal and it's our judgment that there are 50 to 20 million tons of coal that could move to those utilities in the Northeastern United States. That is coal that would come from the Conrail States, Pennsylvania, Ohio, West Virginia, as well as from the States served by Chessie and NW.

Conrail today has committed up to $2 million to provide a facility in the New York Bay area that would allow the transshipment of coal to barges that would provide for a competitive delivery of coal to these reconverted utility stations. Most of those stations are served by water. Hence, the coal will be delivered there, will be competitive from Conrail origin as well as Chessie and NW origins.

Conrail, also along with the other railroads that are represented on this panel, has invested a significant amount of money over the last 4 or 5 years toward the expectation that coal would be a growing segment of our business. Not only have we invested, but the mines that are in the States that Conrail supports have invested and continue to invest in increased productive capacity.

We have over 21 billion tons of coal reserves on or adjacent to the Conrail system. We have a great many mine developments on or adjacent to the Conrail system, that will increase the on-line loadings of Conrail served mines.

In addition to the investments that are being made today, very significant investments on the part of some of the mine operators, increasing productive capacity, Conrail has invested over $200 million in the past 5 years on rail lines that will serve directly or to link to our main coal flow operations.

In addition to the line capacities that we have improved, we have purchased 5,500 new open-top hopper cars at a cost of over $200 million which was all financed in the private sector. We spent another $100 million in rehabilitating another 20,000 hopper cars. This has resulted in a total fleet of about 35,000 cars today, of which over 70 percent are either new or have been rebuilt over the last 5 years.

With the addition of that fleet and with the service that we have been able to perform and we've discussed a little bit earlier about the use of private cars on our railroad, and the increased utilization of these cars that we have provided, we now find that we have a surplus of cars on Conrail that are waiting for coal.

We have a locomotive fleet that has been either purchased or overhauled, 4,000 locomotives since 1976, out of a total fleet of 4,400 locomotives have undergone repair or have been purchased new. So our fleet is available, our railroad is available, we have increased our port capacity. We continue to work with the many, many private developers that have come forward over the past 2 or 3 years that are interested in putting private capital into port development. We see this as an opportunity for Conrail to continue to serve the coal industry as well as our own good.

These factors illustrate we have the capacity for coal growth, tht we are committed in any fashion that we can be to make coal move. We want it to move across Conrail. We want it to move from Conrail origins. We are negotiating continually with many people who are developing or will develop facilities on the east coast that are developing mines, that will develop mines on the east coast. We are negotiating contracts of many types that will allow us to be competitive and to take part in the growth that we think is available.

[The prepared statement of Mr. Barber follows:]

Statement by
Warren G. Barber
Assistant Vice President - Open Top Hopper Business Group
Consolidated Rail Corporation

Before the Senate Committee
on Energy and Natural Resources
Room 3104
Dirksen Senate Office Building
Washington, D. C. 20510

December 3, 1981

My name is Warren Barber. As Assistant Vice President of the Open Top Hopper Business Group for Consolidated Rail Corporation, one of the nation's largest haulers of coal, I have seen many projections over the past five years concerning expected increases in U. S. coal production, use, and export. While many of these projections appear to be overly optimistic, current demand for U. S. coal indicates that the long-predicted increase in world coal use is now close to becoming a reality.

The rising demand is being triggered primarily by the skyrocketing price of oil. As the world's largest producer of coal, and the country with the greatest reserves, the United States must be ready to increase its supply capacity if we want to take advantage of this growing demand.

The greatest growth in demand is expected to be for steam coal for Western Europe. It is estimated that the annual demand for imported coal by these nations will more than double by 1985, to more than 90 million metric tons. It is projected that the U. S. will supply about 25 percent of the 1981 demand, or about 15 million tons. This compares with 11 million tons in 1980, and less than 2 million tons in 1979. The potential for increases in the U. S. share is tied to our ability to supply additional amounts at a competitive price. That ability, in turn, is dependent not only on mine production but also on the capacity and efficiency of our transportation system and our East Coast ports.

Because of the advantage of transportation distance, which equates to costs, the ports on the East Coast of the U. S. will be shipping most of the export coal to the Western European market. Poland, South Africa and Australia all provide aggressive competition for Western Europe's coal supply. However, political factors in Poland and South Africa, and the cost of transport from Australia are responsible for the dramatic shift to U. S. suppliers.

Delivered price and reliability of supply are the most important factors in determining who supplies the coal. It is these two factors which are inextricably tied to the adequacy of U. S. ports.

The increased demand for coal, coupled with a desire to keep transportation costs down, has led to a natural trend to use larger coal vessels to achieve economies of scale. Coal purchasers are seeking to establish controlled supply chains, including proprietary investments in vessels with capacities of 100,000 - 150,000 deadweight tons (dwt) to achieve maximum economy. While the U. S. certainly has world leadership in the ability to produce coal, we are increasingly restrained by the inadequate capacity of our East Coast ports to transload larger quantities of coal and to load the larger vessels. Several projects are underway, and many others have been announced, which would increase the coal-handling capacity at U. S. ports. However, no U. S. coal port currently has a channel depth greater than 46 feet, which restricts our ability to handle the vessels being built for the coal trade.

Market research at Conrail has convinced us that there are specific identifiable markets in Europe, particularly for industrial coal, which will not require deep draft vessels in the foreseeable future. Those markets can be economically served from Philadelphia. In order to serve them, Conrail is expanding its export coal facility in Philedelphia at Pier 124. There we completed a $4 million capital project to increase capacity from 3 to 4 million tons annually. Additionally, a $31.6 million modernization project for further improvements has been approved. The Commonwealth of Pennsylvania has appropriated $22.6 million to participate in this project, which, when completed, will have expanded the pier's capacity to 10 million tons per year, but more importantly, will allow the loading 65,000 ton vessels as contrasted to the present 35,000 ton vessel limit.

In domestic markets for coal, Conrail has forecasted a mixed pattern of growth in its service area. We have projected that shipments on Conrail of metallurgical coal will grow at less than 1% a year over the next five years, reflecting flat demand for steel. Consumption of steam coal by industrial users is expected to experience moderate growth over the next five years. The price differential between coal and oil provides a stimulus for increased industrial coal consumption; however, demand for industrial coal shipments on Conrail is limited somewhat by the continuing decline in the industrial base of the Northeast and Midwest.

However, another major market is also developing for U. S. coal. This is the use of steam coal by utilities, especially by those in the Northeast. The predictions for this market have also been optimistic in the past, but recent Department of Energy studies show that conversions of utilities from oil to coal could increase the demand for coal by at least 20 million tons per year over the next decade. These conversion projects now seem to be imminent, again because comparative fuel costs significantly favor domestic coal over oil.

Many of the utilities which contemplate or have already begun conversion will take advantage of an economical combination of rail and water transportation for the delivery of their coal supply, since most of the generating stations are already served by water. Our studies indicate that the potential market for waterborne coal to utilities and industry in the Northeast could surpass 17 million tons by 1990. These same studies show that Conrail's participation in this market, and many of the cost advantages for the utilities, will depend in great degree on the ability of the East Coast ports to efficiently transship sufficient coal to meet demand.

Conrail is investigating the modernization of facilities at Port Reading, New Jersey, the northernmost U. S. operating rail to water transfer facility. To date, Conrail has appropriated $2 million for dredging, design, permitting, and estimating for the improvement of the facility.

I think it is clear that both the export and domestic markets are important to the United States. In the case of coal exports, increasing our shipments would help ease the balance of payments, which is constantly upset by the cost of importing oil. Increased conversions by Northeast and Midwest utilities will reduce the need for imported oil, and also reduce the cost of producing electricity and impact positively on the balance of payments.

Both markets are important to the U. S. coal industry, especially in the Northeast and Midwest, where the industry has been particularly depressed in recent years. Increased coal production also means increased economic activity for the entire region, especially for the ports and railroads.

That brings me to another very important point: This increased coal production in the Northeast and Midwest, the increased port activity, and the expanded coal markets will generate significant additional coal traffic on the railroads. Much of this coal would be coming from the mines of Pennsylvania and northern West Virginia, and that is Conrail's primary service area. Conrail's rail network blankets the coal fields in this area, so a large increase in coal production would produce substantial new revenues for Conrail. Our studies indicate that Conrail would receive additional revenue well in excess of $200 million if adequate port capacity is in place to handle the coal from the mines we serve. This increased revenue would also be of benefit to the entire region, since it would strengthen the Northeast's and Midwest's largest rail system, which is vital to thousands of shippers.

Let me put Conrail's position in the coal industry in perspective. First of all, Conrail serves an area with vast coal reserves. It is estimated that the recoverable coal along Conrail's lines and tributaries totals more than 21 billion tons. We are now carrying coal from 250 mines, most of which currently have substantial excess capacity. During 1980, Conrail carried almost 80 million tons of coal, 58 million tons of which was loaded at mines directly served by Conrail or its tributaries lines.

Our studies indicate that the mines we currently serve in Pennsylvania, northern West Virginia and southeast Ohio have the capacity to produce an additional 16 million tons of coal per year. In addition, we are aware of 41 mine development projects which are planned for these areas. If they are all completed, an additional 21.5 million tons of annual production capacity will be available by 1985-86.

As I said before, Conrail's coal service is concentrated in Pennsylvania, southern Ohio and northern West Virginia, although we serve all the major coal producing states in the Northeast. Coal from this area is much desired both overseas and domestically. While somewhat higher in sulphur content than coal from other areas, Pennsylvania coal is valued for its high BTU content and very good grindability, an important factor for today's mixed coals. Also, Pennsylvania mines are generally large, modern and efficient, with a reputation for productivity and uninterrupted supply. These factors combine to make Pennsylvania coal attractive to many buyers. In addition, Conrail has access to coal originating on both the Chessie System and the Norfolk & Western through interchange arrangements.

Conrail's commitment to the coal industry is also an important factor. We have spent more than $200 million since 1976 for improvements on our coal-carrying main lines and branch tracks. These expenditures have given Conrail the capacity to handle substantially increased coal shipments.

Conrail has also made a serious commitment to its hopper car fleet for carrying the coal. Since 1978, we have acquired 5,500 coal hoppers, at a cost of $200 million, money that was raised from private financial sources. We have also spent $100 million since 1976 to rehabilitate 20,000 hopper cars. This has resulted in a fleet of 35,000 serviceable hoppers, of which 70 percent are new or rebuilt.

During 1980, because of improved service and car utilization, we were able to achieve our projected coal tonnages for the year, meet demand for coal hoppers, and still have a surplus of 4,000 coal hoppers, even during the peak season. These 4,000 cars represent more than 9 million tons of coal-hauling capacity available right now, with no additional investment requirements.

Our locomotive fleet is also ready to move more coal. Conrail no longer has a shortage of motive power to keep its trains moving. We have purchased or overhauled about 4,000 locomotives since 1976, out of a total fleet of 4,350 units. Conrail now has sufficient locomotives to haul at least 20 million tons of additional coal traffic per year.

To complement our considerable resources in the coal area, Conrail's service has never been better. During the last quarter of 1980, our service reliability was at its highest level in our history, and is now comparable to that of any other major railroad. This is an achievement that many thought would be impossible, but we have known all along that it could be done if we maintained our efforts.

Conrail believes that these factors illustrate a substantial capacity for coal growth. Conrail is committed to a major role in the increased coal transportation needs of the Northeast and Midwest.

Attached are a number of exhibits which document in greater detail a number of the points made in the above comments.

I thank you for this opportunity to comment. I would be happy at this time to entertain your questions.

WORLD COAL RESOURCES AND RECOVERABLE RESERVES

COUNTRY	ESTIMATED RESOURCES- MAXIMUM AVAILABLE IN EARTH (NT)		RECOVERABLE RESERVES- ECONOMICALLY & TECHNOLOGICALLY FEASIBLE TO MINE (NT)		1977 - 2000 CUMULATIVE PRODUCTION AS % OF RECOVERABLE RESERVES
	BILLIONS	% TOTAL	BILLIONS	% TOTAL	
U.S.S.R.	4,860	48.0	110	17.3	16%
UNITED STATES	2,570	25.4	178	27.9	15%
CHINA	1,438	14.2	99	15.5	20%
AUSTRALIA	262	2.6	27	4.3	13%
GERMANY	247	2.4	34	5.4	9%
UNITED KINGDOM	164	1.6	45	7.1	7%
POLAND	124	1.2	22	3.4	11%
CANADA	115	1.1	9	1.5	N/A
INDIA	57	0.6	34	5.3	31%
SOUTH AFRICA	58	0.6	27	4.2	8%
WORLD TOTAL	10,127	100.0	637	100.0	

SOURCE: WOCOL STUDY

SOURCE: NATIONAL COAL ASSOCIATION PUBLICATION

U.S. STEAM COAL EXPORTS HAVE ACCELERATED DRASTICALLY IN THE LAST TWO YEARS, PARTICULARLY TO WESTERN EUROPE.

1979 VERSUS 1980 STEAM COAL EXPORTS

U.S. TO SELECTED COUNTRIES

(THOUSANDS OF NET TONS)

	1979	1980
BELGIUM/LUXEMBURG	171	1,368
FRANCE	183	3,023
WEST GERMANY	696	807
ITALY	-	999
NETHERLANDS	68	1,895
UNITED KINGDOM	38	2,045
DENMARK	102	1,496
FINLAND	-	257
ROMANIA	-	455
SPAIN	241	1,069
JAPAN	413	1,039
SOUTH KOREA	-	68
TAIWAN	1	584
TOTAL	1,913	15,105

ESTIMATED EXPORT POTENTIAL - SELECTED EXPORTERS

(MM NET TONS / YR.)

		YEAR 2000	
COUNTRY	1977	CURRENT EXPECTATIONS	ESTIMATED MAXIMUM
UNITED STATES	54	138 - 220	385
AUSTRALIA	42	176	220
CANADA	13	30 - 52	74
POLAND	43	55	55
SOUTH AFRICA	13	61 - 83	110
CHINA	3	33	N/A
SOVIET UNION	28	55	N/A
	196	548 - 674.	

SOURCE: WOCOL STUDY

OVERVIEW -- ESTIMATED FOR WORLD STEAM COAL EXPORTS

(METRIC TONS)

	1985	1990	2000
WOCOL (CASE B)			
EUROPE	81	142	291
ASIA	29	80	222
INTERAGENCY COAL EXPORT TASK FORCE			
EUROPE (MIDPOINT)	97	145	267
ASIA	37	78	184
ZINDER NERIS			
EUROPE	95	129	--
ASIA	45	105	--

ESTIMATES FOR U.S. STEAM COAL EXPORTS (EXCLUDING CANADA)

(METRIC TONS)

	1985	1990	2000
WOCOL (CASE B)	25	55	126
INTERAGENCY COAL EXPORT TASK FORCE	26	58	179
NATIONAL COAL ASSOCIATION (PRELIMINARY)	34	64	--
PEABODY -- TOTAL	25-35	45-55	--
-- NEW ORLEANS	7- 9	14-16	--

PROJECTED WESTERN EUROPE STEAM COAL DEMAND (MM NET TONS)

Year	Total Demand by Sulfur Content		% Supplied by U.S.	Tons Supplied by U.S.
1981	< 1%	5.54	0	0
	1-2%	40.59	20	8.12
	2-4%	5.02	95	4.77
		51.15		12.89
1982	< 1%	7.51	0	0
	1-2%	45.33	20	9.07
	2-4%	6.88	95	6.54
		59.72		15.61
1983	< 1%	8.92	0	0
	1-2%	59.00	20	11.80
	2-4%	7.65	95	7.27
		75.57		19.07
1984	< 1%	11.53	0	0
	1-2%	67.85	20	13.57
	2-4%	9.28	95	8.82
		88.68		22.39
1985	< 1%	12.57	0	0
	1-2%	82.13	20	16.43
	2-4%	9.36	95	8.89
		104.06		25.32
1990	< 1%	14.08	0	0
	1-2%	114.29	30	32.29
	2-4%	13.53	95	12.85
		141.90		45.14

Source: Zinder Neris Study

Countries: France, West Germany, Spain, Denmark, Italy, Netherlands, Belgium, United Kingdom, Sweden

CONRAIL'S SERVICE TERRITORY INCLUDES VERY SUBSTANTIAL COAL RESERVES

ESTIMATED RECOVERABLE COAL RESERVES

(MILLION TONS)

	TOTAL STATE	ESTIMATED RESERVES DIRECTLY SERVED BY CONRAIL AND SUBSIDIARIES	TOTAL FOR COUNTIES SERVED BY CONRAIL
PENNSYLVANIA	30,837	20,125	17,750
OHIO	19,230	14,307	3,900
NORTHERN WEST VIRGINIA	38,607	5,598	5,000

COAL PRODUCERS IN CONRAIL'S SERVICE TERRITORY INDICATE THAT SUBSTANTIAL EXCESS CAPACITY EXISTS OR WILL BE PLACED ON STREAM BY 1985.

CAPACITY OF CONRAIL AND TRIBUTARY RAILROAD SERVED COAL PRODUCERS

(000) TONS

	SHIPPED 1980	FORECAST 1985
CONRAIL		
PENNSYLVANIA	25,333	38,190
EAST OHIO	3,370	4,150
NORTHERN WEST VIRGINIA	-	-
TOTAL	28,703	42,340
TRIBUTARY LINES		
P&S	2,200	2,000
C&I	3,354	4,020
LEF&C	1,532	2,400
MONTOUR	150	250
MONONGAHELA	7,657	9,250
TOTAL	14,893	17,920
TOTAL ANNUAL CAPACITY	43,596	60,260

Senator **Warner**. Senator Bradley, since you joined us you haven't had an opportunity to question the panel. You may go forward.

Senator **Bradley**. Thank you.

I'd like to ask Mr. Barber several questions.

You alluded to service that Conrail provides to the Northeast and to Philadelphia and New York Harbors. I'm curious, as you look at the next 5 years, what alternatives do you see for Conrail to lower its rail costs to both of those ports?

Mr. **Barber**. Since a high portion of rail costs are created by labor, one way that you eliminate or reduce labor involvement in our kind of an operation is to put a great deal of investment in that operation and find some way to be more efficient. So what we are doing in Philadelphia with out current modernization program, through many other private corporations are doing, or planning, relative to export facilities and I think Mr. Snow discussed it a little bit earlier, where the rail cars divorced from the boat and move coal into the facility, dump it on the ground and then reclaim it, you are able to significantly reduce the labor involvement in coal movement. That will help to drive costs down.

Senator **Bradley**. As you look at the cost components, labor is one. What percentage of your costs would you say labor involves?

Mr. **Barber**. At Conrail it's about half.

Senator **Bradley**. Are there any other areas where you might also look to lower some of the costs? For example, take switching. What kind of costs are involved in that?

Mr. **Barber**. Switching is a very labor intensive element of the total rail cost. We try through rate leverage to have mines put in fast loading facilities to that we can keep an engine coupled with the train and pull through the facility and load it, which saves us labor and it allows for fast loading and movement of equipment. We are trying to provide rate incentives from origin points from the mines to ge facilities put on stream that will allow the rapid loading of cars. We are doing the same thing with people that have the capital to build a new facility to assure that that facility allows for rapid unloading.

Senator **Bradley**. If labor is 50 percent what would you say is switching?

Would each of the other members of the panel also say in your operations what percentage of the cost is labor?

Mr. **Dempsey**. It's about 50 percent for the industry. A little bit under 50 for the industry.

Conrail is a little heavier on labor than the average in the industry.

Mr. **Graves**. Union Pacific is less than 45.

Mr. **Snow**. CSX is about 45.

Mr. **Bales**. Same.

Mr. **Bruce**. Fifty for the ICG.

Senator **Bradley**. Conrail and you operate at 50, and the other three at 45.

Could you break down the cost components any more specifically here? I asked for switching simply because that was one thing that has come to my attention. How would you break down the rest of your cost components?

Mr. **Barber**. Our cost is probably 25 percent to one-third of the total transportation costs. Again, you can move cars more quickly, the more quickly you move the less that component of the total cost becomes.

The size of the train is critical in looking at total cost of transportation. The larger the size of the train that can be moved, the lower the unit cost becomes. So we try and from a pressing standpoint, to provide incentives to reduce switching in origin and destination, to increase the size of the train, to move coal particularly in larger cars.

Senator **Bradley**. The larger cars come from where?

Mr. **Barber**. We provide the cars.

Senator **Bradley**. Are you bringing new larger cars on line?

Mr. **Barber**. We purchased 5,500 cars in the last 3 years.

Senator **Bradley**. Are most of those useable for coal?

Mr. **Barber**. Yes, sir, they are a common car that is used for coal.

Senator **Bradley**. How does that compare to the other railroads? How many cars have you purchased in the last 3 years that are useable for coal?

Mr. **Graves**. Union Pacific is approximately 1,000 cars a year, 1,200 this last year.

Mr. **Dempsey**. It's 10,091 open-top hopper cars last year for the industry.

Senator **Bradley**. Do you have a figure for the last 3 years?

Mr. **Dempsey**. No, I don't. I'll supply it.

Just to give you a magnitude here. We've increased the coal capacity of the freight by about 10 percent since 1974, and that is due not so much to the fact that we have more cars, but to the fact that we brought on 100-ton cars.

Senator **Bradley**. So Conrail last year was about 10 to 15 percent total coal cars.

Mr. Barber. That's over 3 years.

Senator **Bradley**. You have 5,000 cars, 5,500 cars over 3 years, 2,000 cars over 1 year, 10,000 cars, 20 percent.

Do you think that Federal subsidies would be required forever for Conrail?

Mr. **Barber**. You're going to get me in over my head. No; I do not believe so.

Senator **Bradley**. Do you see some real alternatives? Selling off the coal lines, for example?

Mr. **Barber**. No; it's the coal lines that are going to make Conrail provide a very major segment of Conrail's viability.

Senator **Bradley**. So I'm saying, in other words you don't think that Conrail should sell off its most effective part? You're saying put it in a sale position where you can't get the coal lines until you get the other feeder lines.

Mr. **Barber**. The coal lines are one of the more important segments of Conrail.

Senator **Bradley**. Let's say you did sell the coal lines and you dropped the less profitable feeder lines. What would happen to the coal rates?

Mr. **Barber**. I can't believe that there would be very much that would happen to the coal rates.

Senator Bradley. You mean price of coal, say a private-sector firm operating the coal line that is now Conrail, say in Pennsylvania at one of the sites in Pennsylvania, either Clearfield, Greensberg, Reynoldsville, the price would be the same?

Let me ask Union Pacific. If you operated that line, do you think you could deliver the coal to New York Harbor any cheaper than Conrail?

Mr. Graves. Without studying it I would hesitate to answer that.

Senator Bradley. Are any of you interested in that line?

You don't think it would make any difference at all?

Mr. Barber. I could see minimal——

Senator Bradley. If you had a private-sector corporation operating a line that goes from the coalfield to the port, and you didn't have to maintain all the feeder lines that are costing you, you couldn't deliver the coal cheaper than you not delivering it when you've got to maintain all those feeder lines?

Mr. Barber. It's the intermix of those feeder lines from the coalfields onto the main lines, and it's the other tonnage on the main line that allow us to keep our cost competitive with the other eastern railroads, the Chessie and the NW.

Senator Bradley. So you're saying the feeder lines help you?

Mr. Barber. The coal feeder lines.

Senator Bradley. But Conrail has more than coal feeder lines.

Mr. Barber. Yes, sir.

Senator Bradley. I'm saying you sold off those others and kept the coalfield lines. Would you be able to deliver coal cheaper than you can now deliver it? Right now they deliver from Pennsylvania to New York, it's $21.76 per ton. Now could you beat that if you didn't have to maintain these other unprofitable lines?

Mr. Barber. In the pricing that we do and the costing that is behind that pricing, those other costs that you're speaking of, those lines that are not important, are not included in the costs which get into the pricing of coal.

Senator Johnston [presiding]. In Senator Warner's absence why don't we proceed. We have a lot of witnesses.

Mr. Dempsey, can you tell me, can railroads successfully compete with coal slurry pipelines?

Mr. Dempsey. Well we think so. It's a simple question but it's not an easy one to answer. The problem that we have in responding to that question is that we have never seen and the Senate has never seen or the House the underlying cost used by coal slurry pipeline proponents, so it's speculation on our part, but I will say some 10 years ago in conjunction with some of the current promoteers of coal slurry pipelines looked into the economics and they decided to bow out on the grounds that they could perform transportation far more economically and efficiently by way of the existing rail transportation system.

Senator Johnston. Since coal slurry pipelines don't have government support, how can they build their line unless their projections show they can make a profit?

Mr. Dempsey. I think even the most fervent advocates of coal slurry pipelines would say there is a great deal of speculation involved in the questions of coal slurry pipelines. Everyone agrees that in the early years, rail transportation would be more economical than coal slurry pipelines. The advocates of coal slurry pipelines count on inflation to have the cost curve run in the other direction after some period of time. It is because railroads are much more labor intensive than coal slurry pipelines, therefore more subject to the impact of inflation. But that means we've got to speculate about what the inflation curve is. So there is a great deal of speculation involved.

I know you've seen the Office of Technology report on the matter. They sent out four scenarios, in two of which they concluded coal slurry pipelines would be more efficient and in two they concluded rail would be more efficient. Testifying as to all the suppositions that they used in the scenarios and finally, somebody on the panel said, well are you really saying there isn't any evidence that's good enough one way or the other? He said, that's exactly what I'm saying.

I can't say anything better than the head of the OTA. But to your question, it would have to be, for people to sink money into it, they would have to be pursuaded they could make a go. The way they make a go is to get 25 or 30 year contracts and that means that coal, 20 million tons, 25 millions tons a year, is guaranteed, and even if it doesn't go, the payments have to be made. That is the financing.

Once those contracts are in hand and the money is put into something in the system, it may not work out. That is to say the costs may be more than the rates provide, but all that means, you then go through a bankruptcy ringer, you write down the cost of the product and somebody else is in the picture.

Now it's our concern. When I say we think we can beat coal slurry pipelines in the markeplace, usually somebody says well then why don't you want to compete with them. My response is just the one that I've given. That is to say once these contracts are let, the pipeline is going to be built and once it's built it's going to be operated, at least for the 25 or 30 years, even if it means that some of the investors go bankrupt in the meantime. So that $20 or $30 million a year is foreclosed from the competition by rails for the period of time.

Senator **Johnston**. I'm concerned with what you said earlier about the nonprofitability of railroads. That's probably due to a number of different things, because we very much need a strong rail system. However from the standpoint of the consumer, the citizen I guess you could say, whom we represent, if the coal slurry pipelines would make for a more competitive market, that is to say for a lower price on coal, why should not we as legislators be for that?

Mr. **Dempsey**. For several reasons I would suggest. First, I wouldn't concede that it would make for a lower cost of coal to the consumer.

Senator **Johnston**. Surely, it could not make for a higher cost.

Mr. **Dempsey**. It might very well.

What I'm saying is, I think that rails, I believe, could provide lower cost transportation over a 30-year period than coal slurry pipelines. But once the pipeline is let, rails are not able to compete at all. So I'm saying yes, it could very well mean a higher cost.

But there are other considerations here. What we're really talking about is having the Federal Government intervene in this legislative process and override the decisions of the individual States. That is to say the coal slurry pipeline proponents have been unable to persuade a number of States to grant them the power of domain or whatever the State legislatures, whether it be water, or in the case of many of the Western States, so they're asking the Federal Government to intervene and override the judgment of the State legislatures.

I suggest that particularly the current, where the country is obviously engaged in a rethinking of the appropriate role of the Federal Government, that that isn't the step that ought to be taken.

Senator JOHNSTON. Particularly your railroad.

Mr. DEMPSEY. Yes; that's right, to be sure.

Beyond that, you've been hearing from Conrail and you know how much the Federal Government has been taxed by the Conrail problem, the collapse of the Penn Central. We had the northeast rail structure almost completely go. We have the Rock Island wiped off the face of the railroad map. The first railroad to just disappear. It's an old railroad and a distinguished railroad. We had the Milwaukee trunk, we had the cancer of the Penn Central spread through the middle west and we saw the industry in a gradual slide. I think that was the perception of everybody in the industry, everybody in Congress. It led the Congress to take the dramatic action it took with respect to Conrail. It led the Federal Government to act I think quite correctly in the case of the Rock Island and let the Milwaukee by trunkated.

But that is the result I suggest to you, of perverse public policy with respect to the railroads, of overregulation of subsidies to our competitors. Things look as if they're turning around. We had the best 12 months that we've had in over 30 years.

Now it was only a 4.56 percent return on investment and that's not very good, but at least we're beginning to climb up the ladder and what I suggest to you Senator is that for the Federal Government in these circumstances to take an action that would jeopardize the future of Conrail, as the Conrail respresentative said, coal is their number one, and as the industry as a whole, is a step that you ought to think about very carefully.

Senator JOHNSTON. I'm not at all persuaded by the States' right argument.

Mr. DEMPSEY. That's why I've tried some others.

Senator JOHNSTON. You know the traditional arguments. All the western railroads had eminent domain to get started.

Mr. DEMPSEY. We had State eminent domain. Only natural gas companies have Federal domain.

Senator JOHNSTON. It's OK if the State grants eminent domain and it's not all right if the Federal Government does so, what we're dealing with is the national interest and if coal slurry pipelines are in the national interest I have not the slightest doubt that we ought to proceed to give in and not be persuaded by the States' rights argument, except on the question of water, where I think that is a real State interest. But it is not a State interest to keep a railroad, a highway, or a coal slurry pipeline from crossing a particular tract of land in order to preserve a monopoly.

Mr. **Dempsey**. At least in the West that's not a problem for the coal slurry pipeline operators. They can cross rail lines. In ETSI, for example, which I suppose is the project furthest along, certainly, the railroad is not stopping them.

Senator **Johnston**. Some 70 lawsuits later they are able to proceed, and I'm glad for that.

Let me ask one final question. I really am concerned about competition and I don't believe the ICC is the solution for competition. Frankly, I think the ICC has done just a horrendous job of regulating. We would have been much better off to have pure monopolies, and we don't have pure monopolies, but we would have been better off in my judgment to have pure monopolies than to go through the charade of ICC regulation.

I mean it has been a charade that has hurt the country. It has not really restrained rates and has done nothing that I can see to help. But what would you say to this, that in the West some three railroads carry about 98 percent of western coal. That there is not very much overlap among railroads, in terms of the geographic areas they serve. When the Northwest and Southern merge in the new company, they and the CSX will carry about 85 percent of eastern coal with perhaps a little more geographic overlap, but still a great deal of competitive groups.

How do you square that with the argument to let competition deal with it?

Mr. **Dempsey**. I can approach it in several different ways. We view the coal market as the highlight competitive market and that is irrespective of whether one railroad serves a particular coal field or two, and you're quite right in your appraisal of in general the structure of the rail industry.

That is because one coalfield competes with another coalfield. One coal mine competes with another coal mine. Coal competes with oil, natural gas, potentially the shale oil, and so the introduction of coal slurry pipelines seems to me would make no difference at all in that general picture which is one of competition. That competition is much more effective now in my judgment because of the passage of the Staggers Act which confirms the right of the rail to make contracts. Because what that means is when the utility converts or when a new utility is built and they're looking for a source of coal, they can now nail down not simply the source of coal in a long-term contract, but the rail transportation component of the delivered cost. When they do that they are looking at all the available sources of coal and they're playing one off against the other and that is exactly what happens in this marketplace and that is what accounts for the fact, as I indicated before, and notwithstanding deregulation and not withstanding the relative condition of the rail industry financially, coal rates have not soared.

Now if we had a monopoly position they would have soared. Either that or we would have been pretty stupid monopolists. We're not stupid, at least I don't think we are.

Senator **Johnston**. Thank you.

Senator **Warner** [presiding]. We have a problem. The Chair has obtained permission for this hearing to go on and afford the other panels equal time and equal opportunity to express their viewpoints and also for members to question. So from that standpoint we're all right. But I'm certain there are members of the succeeding panels who for reasons of personal or otherwise have problems in which case I will try and accommodate them and advance them. If they will let their problems be known to Mr. Sindelar, he will then rearrange the schedule if it is necessary and if it can be done.

Senator **Ford**. What percentage of the income to each of the railroads is by the hauling of coal, Mr. Barber?

Mr. **Barber**. In our railroad, about 15 percent of Conrail's revenues are for movement of coal.

Coal income of our total freight income is 15 percent.

Mr. **Graves**. Approximately 15 percent of the Union Pacific's total revenues, freight revenues. Coal represents approximately 15 percent.

Senator **Ford**. I noticed in your statement you said since 1975 it has become more than 50 percent.

Mr. **Graves**. We're talking tonnage. In terms of tonnage we handle approximately 25 percent of our tonnage is coal, which provides about 15 percent of our revenue base.

Mr. **Snow**. Senator, it is 40-percent tonnage, 30-percent revenues.

Senator **Ford**. Does that include the S and the X?

Mr. **Snow**. That includes the works.

Mr. **Bales**. About 50 percent. This year maybe just a little more because our general merchandise business is very depressed. About 50 percent. Generally, it's less.

Mr. **Bruce**. A billion dollar total revenue, 12 percent is coal.

Mr. **DEmpsey**. For the industry it's 70-percent gross revenues and about 25-percent tonnage.

Senator **Ford**. Mr. Bruce, I've been reading, it's beginning to disturb me a little bit about fires from coal, who is financially responsible for a shipment of coal and the ship catches on fire? Where is the financial responsibility?

Mr. **Bruce**. The hot coal problem is one that has surfaced back in July, August, and September. It's a function of three or four different situations. One is time in transit. The other is moisture content and coal, and to a lesser extent the sulfur content for the coal, because there are a number of chemicals that coal is made up of, but it's moisture and time that has a serious effect on causing spontaneous combustion.

When coal is loaded into barges you have 1,500 tons approximately that are placed in a barge, and the longer transit time that has come up since the exportation of coals from Indiana, Kentucky, eastern Kentucky area, the transit time down to the Port of New Orleans is such that with the added moisture through rain storms or water slopping over the gunnels into the barge and no place for the water to go except to drain down to the bottom of the barge and sit there, that's been causing part of the problem of this bit buildup.

When the coal is then unloaded from the barge and it is hot and put into a storage pile, it contains the problem because as you increase the mass, you increase the quantity of coal in the mass, the moisture, and you can continue to have that heating buildup and there is no way to stop it.

Senator **Warner**. Pressure is also a component.

Mr. **Bruce**. Not pressure. Oxygen is also another key factor, because coal loaded loosely in a pile, whether it be in a barge or in a pile, the amount of oxygen that surrounds each one of the particles of coal added to the moisture and the chemical content of coal creates this hot coal situation.

Now if you load the coal into a ship and then you have that mass of 60,000 tons, in a ship you have this heating continue to build up and there have been several ships that have left port and have gone out to sea and had to turn around and come back because they had found that the ship was getting so hot it could possibly catch on fire. The question of who is liable, I'm not sure. I'm not sure who is liable in a case like that. It's a function of the mass of coal over time and the moisture content.

We found an interesting situation through our studies, that by compressing the coal and by working the pile and getting the oxygen content out, you reduce the possibility of hot coal. You also reduce the possibility of hot coal when you ship by rail. It sounds like a self-serving thing to bring that out, but it's a point of fact. You have a smaller quantity in each one of the cars, you have a wind wipe across the top of the car that dries the coal, and you also have the drainage capability through the hopper pockets at the bottom of the car. So hot coal is not a problem when you ship by rail.

I'm not sure I gave you the exact answer you were looking for, but it is a subject of a great deal of concern these days.

Senator **Ford**. You mean the coal drainage is there and you can drain it out on the ground?

Mr. **Bruce**. It's draining out en route because you have the four hopper pockets in each car, and 100 tons only as opposed to 1,500 tons in a barge. You don't have that moisture buildup which is a considerable problem.

Senator **Ford**. What is possibility of pumping from a barge?

Mr. **Bruce**. That's going to cost much money.

Senator **Ford**. How much?

Mr. **Bruce**. I have no idea, but if you're going to have those pumps put in each one of the barges, that is going to add considerably to the transportation costs.

Senator **Ford**. It's just something I began to see.

Mr. **Bruce**. The Bureau of Mines has undertaken a considerable study of this and I'm sure they'll come up with some insight as to what to do, but there is no question, it has surfaced since the exportation of coal. The distance traveled, the distance that the coal is traveling from the mines to points of export, has certainly got to be a contributing factor.

Senator **Bradley**. I have one more question.

In each of your companies as you look at the next 5 years, what kind of capital investment plan do you have and how would that change based upon the change in the export situation and what signs would you specifically have to see in an export situation that would cause you to change your capital investment plan?

Mr. **Graves**. As far as Union Pacific is concerned, we have the flexibility to track our capital programs with the growth in demand for transportation services. I believe you will find that the railroads will build freight car capacity, will purchase locomotives, will provide additional track capacity consistent with that growth in demand so we can track with it. We have a capital plan as we have a long range plan which indicates rather significant growths in coal and particularly export coal, and our capital plan represents tracking with those kinds of demand on transportation services.

Senator **BRADLEY**. What percent increase in coal exports does your present capital plan expect?

Mr. **GRAVES**. Given a 5 million-ton coal export handling in 1981, we expect that to double by the year 1985.

Mr. **BARBER**. In the coal area we're fortunate in some ways, when you talk about utility conversion to coal or development instruction of the utility to burn coal that there is sufficient and very significant lead time between that planning and the actual need to move coal, so there is an opportunity to provide an adequate number of cars and whatever kind of rail capacity might be needed if any at all.

Senator **BRADLEY**. Let me try to be a little more specific.

What percent of your present capacity are you utilizing given existing coal demand? Second, what is your capital investment plan and what does that capital investment plan expect coal exports to be 5 years from now?

Mr. **BARBER**. We forecast with the completion of our pier project in Philadelphia next year, that over 1980 that we will more than double, or about double our——

Senator **BRADLEY**. From what to what?

Mr. **BARBER**. From 3½ million tons to 7 million tons.

Senator **BRADLEY**. I'm speaking of Conrail, generally, and not just the Philadelphia operation.

Union Pacific said you'd go from 5 to 10 million tons by 1985, and that is what your capital investment plan has anticipated. What about Conrail?

Mr. **BARBER**. Our export tonnage last year was a little over 5 million tons and we expect that that will double in total. Our investment commitments to Pier 124 in Philadelphia and beyond that, with the additional capacities that are needed for export coal come from the private sector financing of other facilities in the Philadelphia area and Baltimore and the New York area.

Mr. **SNOW**. Current export coal on the order of 35 million tons annually, going to 45 to 50 million tons in 1985.

Senator **BRADLEY**. You can do that with your present capital investment?

Mr. **SNOW**. We have a capital investment program of about 1.2 billion annually which is predicated on this kind of growth in coal exports as well as other growth in traffic. As with the other railroads we can augment capacity as need be. This is a realistic forecast, I think, of where the export coal market is going and of that increase from 37 to 45 to 50. The bulk will be steam coal, and the capacity to move that coal through the piers will be there and the piers will be there on our present expectations.

Senator **BRADLEY**. At the moment you do not have an infrastructure problem. In other words, you are not exporting at the maximum capacity of your lines.

Mr. **Snow**. We are exporting at close to the maximum capacity of our current facilities. We have export facilities, and I mean piers, in Baltimore and Newport News. Those piers are operating at their practical capacity, not their theoretical, but practical capacity. What's going to happen in the next 3 years is that new export dumping facilities will be brought on stream which will treble the export dumping capacity at Baltimore and Newport News. So the port bottleneck will be corrected and we have the transportation capacity to move the coal from eastern Kentucky and from western Maryland and West Virginia and Virginia to Baltimore and Newport News. So I don't think the railroad capacity is the problem. The support capacity, and it's being rectified.

Mr. **Bales**. Our company has been so involved with coal for many years, we spend a great portion of our investment every year on our coal facilities. We have we believe the only double track system in the coalfields to the port area and we are not operating at capacity today. In 1970 we dumped 35 million tons of coal and we haven't dumped that at all since.

Last year being our second best year with 32 million tons. We think this year we will dump 33 plus.

We have capacity at the port today that is not being used. Virginia Port Authority is due to develop a port that we will serve at Portsmouth, Va. This will add an additional 25 million tons of capacity in the next 3 to 4 years and we will be serving that facility. So Hampton Roads will continue to be the largest coal port certainly in this country and we think probably in the world.

Senator **Bradley**. So you're saying with your present railroad capital infrastructure that you could export 60 million tons of coal on those tracks?

Mr. **Bales**. Yes, sir, I think so. We have in the last 5 months, we have loaded at mines on the NW system between 8 and 8½ million tons of coal each month. We have not made any special arrangements for that other than through some contracts and such. We are prepared to expand our system as the market would dictate.

Senator **Bradley**. What does your capital plan for the next 5 years anticipate? How much are you going to put into the purchase of more cars? What does that anticipate the market going to?

Mr. **Bales**. We build five coal hoppers every day in our shops. We continue to maintain we think the best rail system for coal haulage in the country and we are prepared to continue to do that.

Our forecasts are for some increasing in the market. Principally, our business has been metallurgical business. We do not see a tremendous growth in that. A very moderate growth at best.

There is a good demand for steam coal and we think we will participate in that.

Senator **Bradley**. But what is the volume of export increase in 5 years that you project? Union Pacific said 5 to 10. Conrail 5 to 10.

Mr. **Bales**. Well, Senator, we've been exporting coal, we ship coal in Norfolk, Va., started in 1885. I don't believe my company in all that time was able to extend 5 years ahead and get within several percentage points of what they thought they could do.

We have a good idea. We show continued growth in the market and we know that we will be there prepared to handle it.

Senator **Bradley**. But the capital investment plan of the company doesn't project what you will do in exports in 5 years?

Mr. **Bales**. Private interest will build a new facility at Portsmouth, Va., and we will serve that facility. We have tracks available to serve that facility. We are maintaining the best system in the country to move that coal, so we're there now.

Senator **Bradley**. Five years from now you don't expect to be, on your tracks, exporting more than 60 million tons of coal?

Mr. **Bales**. I would like to think we would. We have the capacity.

Mr. **Bruce**. In contrast to my colleagues, these numbers that you will now hear are based on a 5-year plan. They're considerably smaller, but we're coming from a market share of zero. As our activities were categorized last year, as being dust in the bend of the Norfolk & Western, I think the categorization is quite correct. But we are growing.

We have 6,000 hopper cars that we have operated. We build our own as many of the other railroads do. We have dedicated 400 brandnew cars to the export business that we have begun to engage in. That is an expenditure of $20 million.

Over the next 5 years I see our position in export coal, export steam coal, going from where it is now, virtually zero. This year it will be 150,000 tons, that's pretty good dust, going to something like 500,000 tons next year. Over the 5-year period I see by 1984 5 million tons in export coal.

Of the total amount of coal that we handle today, 30 million tons, that brings us No. 9 in the 10 railroads.

Senator **Bradley**. If you do that with your present capital, you do that with your present capital investment plan?

Mr. **Bruce**. Yes. We would see that running about the same over the next 5-year period. Our lines, our feeder lines and our main line system from the coalfields all the way to the ports are in topnotch condition as a result of these investments.

I think that we are going to need, if this 5 million tons comes into position as we estimate that it will, we are going to need some additional 1,000 cars and that would be an investment of somewhere in the neighborhood of $30 to $40 million.

Senator **Bradley**. So you need 7,400 cars?

Mr. **Bruce**. That's totally. Don't confuse the domestic and the export. You just hold the export aside. I'm talking about somewhere in the neighborhood of 1,500 cars. We have 400 of that in place now. Brandnew cars that we just built.

Senator **Warner**. Thank you very much on behalf of myself and my colleagues and the committee, it was a very informative session.

Now the Chair has indicated a willingness to try and accommodate others. Here is the schedule the Chair has established.

Lunch period will be from 1:15 to 1:45 p.m. Between now and 1:15 we will listen to three witnesses, each of whom has indicated they have personal travel commitments and other engagements they cannot cancel. Therefore, we will have the following three witnesses between now and 1:15. Mr. Farrand, vice president, Government relations, Peabody; Narry LaViers, Southeast Coal Corp.; and Gerald Patrick, Arch Mineral Corp.

Mr. **Farrand**. I appreciate your willingness to accommodate me.

STATEMENT OF CHRIS FARRAND, VICE PRESIDENT, GOVERNMENT RELATIONS, PEABODY COAL CO., ST. LOUIS, MO.

Mr. **Farrand**. My name is Chris Farrand and I am vice president of Peabody Coal Co. I will submit an entire statement for the record if I might, and summarize briefly what we had intended to say.

Mr. Chairman, the subcommittee has probably heard a great deal of testimony about the growth, particularly in the steam coal export market and I will not dwell on that. My point today is that the one major impediment to continued growth in that market we believe is in the inland transportation and the ocean transportation segment.

From our perspective as a producer of coal, primarily in the Midwest although we do have operations in the Far West as well, we believe that there are a number of constraining factors that will dictate the growth of the Midwestern coal export market.

The primary factors affecting gulf coast exports are obviously rail rates about which there has been a great deal of discussion. The future of barge rates and particularly the imposition of user charges on those rates, the dredging of the harbors along the gulf coast, particularly the so-called lower Mississippi project, the future on the east coast which will obviously affect the secondary market in the Midwest and finally the sulfur specifications among countries which are looking toward U.S. steam coal.

Mr. Chairman, I'd like to begin by dispelling some comments that were made in the previous panel, but before I do so I think it would be a good idea if I described the general movement of coal from the Midwest to the export market.

We produce coal in Illinois and Indiana and to some degree in Ohio and a great deal in western Kentucky. That coal moves, at this point by closed loop rail to our own barge docks and is barged directly to New Orleans. At this point we are exporting only a small number of coal, and I'm talking about Peabody in particular. We've had a great deal of experience in marketing coal.

In Florida, which comes from western Kentucky and Illinois and travels by water almost the entire length, it travels only a very few miles by rail. We are developing large docks in the Illinois basin which will be accommodated not by rail at all but in fact by belt line directly from the minesite. So it will not go on rail at any part of that journey at all.

We might add that we're also developing a major port facility in New Orleans or north New Orleans which will accommodate initially some 10 million tons and will include not only the barge fleet areas, but the coal storage and coal blending facilities.

There has been some implications voiced this morning that large traffic is not necessarily competitive in rail traffic. I would beg to differ. Our charge or our cost of moving coal down the Mississippi from south central Illinois amounts to something less than eight-tenths of 1 cent per ton-mile. I checked recently with the Interstate Commerce Commission about what the average coal haulage rates are in the country on the rail system and I can't speak for any particular rail system, but they average about 1.4 cents per ton-mile for unit trains and about 2.2 cents per mile for nonunit trains. So as you can see there is an advantage. It's a very large central artery to get those midwestern reserves of coal to an ocean port for transshipment of Illinois basin coal, Kentucky coal, and as far East as western Pennsylvania and West Virginia that can go down the Ohio River, through the tributaries and down the Mississippi for transshipment to New Orleans.

This spring Peabody conducted a detailed study on primarily the lower Mississippi River project and determined not only what the benefits for the projects were but to determine what equally will be the growth in the steam coal market for the Midwest.

Our study would estimate that New Orleans can transship up to 40 percent of the total U.S. steam coal exports by the year 2000. Now that depends to large measure about whether we accommodate the deep-draft vessels in that river system.

As a matter of fact, we estimated that the actual gross tonnage in the year 2000 would be about 43 million tons without the harbor dredging project I'm sure most of you are familiar with in New Orleans. And if that harbor were able to accommodate the deep-draft vessels, we would be able to probably double that amount by the year 2000. So it's a very significant factor in the growth of exports from the Midwest.

There are a couple of other things that I would like to try and dispel. There was a comment made earlier about the problem of the spontaneous combustion of coal shipments. This is a problem with any large volume of coal under any circumstances. My response to that is that we've been shipping coal for many years from Illinois through the Mississippi, through New Orleans, out the mouth to Tampa, Fla. and we've never had a problem. It's a question of the handling of coal. If it's properly packed in the barges it is not a problem.

I will say that we own a barge company. We've operated our own barges. We've handled that stuff ourselves. We have a great deal of experience in that, and it simply is not a problem. There has been publicity of late about the spontaneous combustion in barge haulage, and I have to say that from the evidence we've been able to dig up it is because the shippers, in this case it was not a coal producer but a coal broker, simply bought the coal before he had the market and he left it sitting in barges for an inordinate period of time, and when it was finally loaded on an ocean vessel it was in very bad condition.

We don't think that is the way to operate and we wouldn't load it that way, and we haven't had a similar experience over the past many years that we've operated the system.

The only other factors that will affect our ability to sell coal abroad is the sulfur content and this is not a transportation factor but it is a large determinant in the market share in the Midwest. The Illinois basin coal generally averages about 3 percent sulfur. European demand is for sulfur in the 1- to 2-percent range. We have not seen this as a huge constraint at this point. We are dealing daily with European, Latin American, and Pacific rim buyers. We use that coal for blending or we use it for specific purposes such as investor uses and cement.

We believe it will be a constraint in the long run for midwestern coal, but not a huge constraint from the standpoint that as demand rises abroad that they are going to want to broaden their sources of supplies as best they can and they will buy a given amount of midwestern high-sulfur coal either to be blended in this country or to be blended over there. And we think that we will get a sizeable share of the market provided that we can accommodate the transportation.

Our transportation problems in the Midwest are relatively simple. They are simply to get ports built so we can accommodate the larger traffic, and that brings me to another point I'd like to correct.

The point was raised this morning that we might have to study the need for deep-draft harbors a little further to see whether consuming nations can accommodate those large vessels. The point was also made, and I believe correctly, that there are $5 to $6 savings per ton of coal shipped on a large, in excess of 100,000 tons, versus a panamex-size collier. Our studies bear out this savings. My point is this, that it that seems to be a problem, if we're building a harbor at one end of the supply stream that does not match the supply stream, then it would seem strange to me that our competition in the world coal market, primarily Australia and South Africa, are doing some pretty sorry things because they've already built their harbors. Moreover, we've seen a definite trend in the world collier fleet, at the present time only about 7 percent of the coal movements in the world trade were on the supercollier-size vessel. These aren't our projections, these are the maritime industry's projections, that by 1985 25 percent of those movements of the tonnage and the world coal trade will be carried on those larger vessels, and by 1990 it will go up to 44.

Senator **Bradley**. The larger vessels are 150,000 tons?

Mr. **Farrand**. Yes; versus the 35,000- to 60,000-ton class of the bulk of the collier fleet. And by 1990 it would be 44 percent of those shipments.

The point is that that fleet is going to change and our competition is going to accommodate that fleet. And to the extent that we fail to accommodate that fleet, we don't get that business. It's as simple as that. And I think the chairman made the point earlier this morning that we either get those contracts now, because our customers are looking for deliveries in the last half of the decade in the 1980's and beyond, and they've got to sign those contracts in the next couple of years to accommodate it. We either get that business now or we lose it for an extended period of time because of the nature of the contracting that exists in our business.

So we have an opportunity that we have to satisfy, and we have to satisfy it by accommodating the changing collier fleet.

Senator **Bradley**. How far in advance did you say your contracts are made?

Mr. **Farrand**. Domestically my company sells almost entirely long-term contracts up to 30 years. I can't say from my experience in the steam coal market abroad we know exactly what it will be because the steam coal market for U.S. coal has just developed in the last 2 to 3 years and it's hard to say precisely what that experience is.

What we're discussing is relatively long-term contracts, 10 years or more.

Senator WARNER. We must accommodate the others.

[The prepared statement and study submitted by Mr. Farrand follows:]

TESTIMONY OF

CHRIS FARRAND
VICE PRESIDENT, GOVERNMENT RELATIONS
PEABODY COAL COMPANY

ON

U.S. COAL EXPORTS

BEFORE THE

Energy and Mineral Resources Subcommittee
Energy and Natural Resources Committee
United States Senate

Washington, D. C.
December 3, 1981

Mr. Chairman, Members of the Subcommittee,

My name is Chris Farrand; I am a Vice President of Peabody Coal Company. We very much appreciate this opportunity to appear before this Subcommittee, and we commend the Chairman and the Subcommittee for their interest in the potential for increased exports of U.S. coal.

Peabody Coal Company is the nation's largest producer of coal. We have 39 operating mines in 10 states. In 1980, Peabody produced more than 59 million tons of steam-grade coal for utility powerplants in the Midwest, South and Southwest. In recent years, Peabody's business has been entirely domestic. However, we are now entering the international coal market, as interest in U.S. coal exports, including coal from the interior regions of the country, has grown exponentially. We are in almost daily contact with interested foreign coal buyers.

GROWTH IN STEAM COAL EXPORTS

There has always been a market abroad for metallurgical grade U.S. coal, but the market for America's vast reserves of steam coal is a very recent phenomenon. As late as 1979, excluding exports to Canada, only 2.5 million tons of steam coal were exported from the U.S. Last year, that figure had risen to 16 million tons. According to the Draft Report of the Interagency Coal Export Task Force (ICE) completed early this year, exports of steam coal will rise to 26 million tons by 1985, 58 million tons by 1990, and 197 million tons by the year 2000. These estimates may have already been exceeded; the National Coal Association has revised its steam coal export forecast for 1981 to 30 million tons. These projections represent the midpoint of a wide range of estimates for U.S. steam coal exports. For example, the range of estimates for U.S. steam coal exports in 1990 is 28-100 million tons annually, and the range for the year 2000 is 101 to 292 million tons. These figures underscore not only the vast potential, but also the sensitivity of the market for U.S. steam coal and the fragility of the U.S. share of the world coal market.

The reasons for this sudden surge in the market for U.S. coal are quite simple. Oil prices have climbed dramatically -- again. Coal represents a tremendous bargain when compared to oil for electric power generation. In this country, the average delivered cost of oil at utility powerplants exceeds the delivered cost of the BTU-equivalent in coal by a factor of nearly four to one 1/. Nations around the world are scrambling to secure supplies of coal to displace the insecure and expensive oil they have been using in powerplants. While the U.S. is not without some very stiff competition, we are an attractive source for this coal because of the capacity of our industry, the size and quality of our reserves, and because

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1/ Monthly Energy Review, Department of Energy, August 1981: 568.4 cents per million BTUs vs. 146.9 cents per million BTUs delivered.

the competitive U.S. coal market can act as a stabilizing influence on world coal prices.

Our competition in the world coal market consists primarily of Canada, Poland, South Africa and Australia. Canada is somewhat limited by the capacity of its industry and the distance of its western reserves to European markets. Poland's coal production is being absorbed more and more by the Soviet Union, whose own production has lagged behind expectations. While Poland has been a principal supplier of coal, especially in Europe, its market share has declined sharply in the last two years and is expected to decline further over the next two decades. This leaves South Africa and Australia as our primary competition in the long run.

At the present time, Australian coal can be delivered to Japan at less cost than U.S. coal. Similarly, South African coal delivered to Europe can underprice U.S. coal delivered 2/. Nevertheless, strong interest in U.S. coal persists among both European and Asian importing nations.

U.S. COAL SHIPPING CAPACITY

Although the U.S. has more than adequate mining capacity to meet this new demand, we are hindered in our ability to compete effectively due to the limitations on the transportation and port capacity needed to ship coal in large quantities

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2/ ICE Draft Report, p. 95, Table 6-1: $2.35/million BTU vs. $1.95/million BTU, Department of Energy, January 1981.

to these eager new customers. The sight of row after row of colliers lying at anchor awaiting berths at Hampton Roads, Baltimore and elsewhere along the East Coast became fairly commonplace last fall and winter. Earlier this year, the demurrage charges on the vessels were estimated to amount to as much as $19 per ton of coal shipped3/ as vessels waited as long as 100 days to load. This is clearly not the way in which the U.S. can hope to compete.

At present, the primary constraint is a lack of dockside loading and storage facilities to handle the steam coal trade. This problem is being resolved rapidly as privately-financed coal-handling facilities are being developed at East Coast, Gulf and West Coast ports. Current coal-handling capacity at U.S. ports is estimated at 94 million tons per year4/, but this is expected to increase to more than 250 million tons of annual capacity by 1985, assuming there are no significant delays in permitting and licensing such facilities5/.

The capacity to load coal must be combined with the ability to ship it economically. In the future, the competitiveness of U.S. coal in the world market will depend upon

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3/ Statement of ATIC, the French Coal Importing Consortium, quoted in the Washington Post, Sunday, May 17, 1981.

4/ Includes facilities for metallurgical coal trade.

5/ ICE Draft Report, Survey of U.S. Ports, p. 1-13, Table I-4, Department of Energy, January 1981.

our ability to provide deep-draft access to our harbors with their expanded coal-handling facilities. The economies of scale in using larger colliers for long-distance ocean transport are so compelling that the world coal fleet is being rapidly transformed. Thirty-five to forty percent reductions in ocean freight rates are realized by using 150,000-ton colliers instead of the 60,000-ton vessels to which most U.S. coal ports, including the Port of New Orleans, are now restricted. Today, an estimated 65 percent of coal in world trade is hauled in vessels of the 35,000-80,000 DWT class, and only 7 percent of the coal is hauled in vessels of 100,000 DWT or more. By 1985, an estimated 25 percent of world coal trade shipments will be in these larger colliers, and by 1990, 44 percent of the tonnage may be hauled in these vessels[6].

South Africa and Australia already have deep-draft access to many of their coal-handling ports and are developing greater loading capacity. It is imperative to the maintenance of a strong U.S. share of the market that we prepare to take advantage of the economies of scale and the transformation of the coal fleet. We must develop our own deep-draft capability in order to compete. If we cannot provide such access in the very near future, those large colliers will be calling on Australian and South African ports for years to come under the long-term contractual arrangements that typify the coal

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6/ ICE Draft Report, p. 89, Table 5-15, Department of Energy, January 1981.

trade. Foreign coal buyers must secure supplies years in advance. They are making decisions now based on a negative perception that the U.S. has no firm policy regarding deep-draft access for coal exports.

The U.S. is on the verge of realizing a golden opportunity to become a major exporter of energy -- a role that has long-term implications not only for our trade relations, but also for the strength of our currency as well. This opportunity may well be missed if Congress does not act and act quickly to accelerate port dredging.

While the port dredging issue continues to cloud the picture for increased coal exports, the U.S. has a number of natural advantages in the world coal market. First, we have abundant reserves of high quality coal which are spread throughout the East, Midwest and West. Second, we are fortunate to have a fairly efficient transportation infrastructure that includes a relatively high capacity rail network and an extensive inland waterways system which provides inexpensive access to some of our largest coal fields. When these factors are combined with adequate transhipment facilities and ports which can accommodate deep-draft bulk carriers, the U.S. will be able to compete in the world market very effectively.

GULF COAST COAL EXPORTS

As a holder of large coal reserves in the Midwest, Peabody has an interest in the export market generally and a specific interest in exporting coal through the Mississippi River and its tributary waterways. Coal from Illinois, Indiana, Ohio, Kentucky and as far east as West Virginia and western Pennsylvania can be barged directly to New Orleans and other Lower Mississippi ports for transhipment to Europe, Latin America and even the Orient. Coal from the West can also find its way to Gulf ports either by rail, rail barge link or slurry pipeline. Peabody estimates that the Lower Mississippi River could handle as much as 40 percent of U.S. steam coal exports by the year 2000.

The key factors influencing exports of U.S. steam coal through Lower Mississippi and other Gulf Coast ports are: railroad rates, sulfur specifications, the timing of the proposed dredging project for the Lower Mississippi River, the size of the available collier fleet, and the possibility of continued congestion of East Coast ports.

If rail rates continue to climb in terms of real cost per ton mile (or per unit under the long-term contracting provisions of the Staggers Rail Act), then all U.S. coal exports will be adversely affected. However, Gulf Coast exports will be less affected because of the availability of competing waterborne carriers. Already we have seen rail carriers check their rates in the region in order to remain competitive with barge rates. The Gulf Coast share of total U.S. exports will depend in large measure on the rate patterns established by the newly deregulated rail carriers.

Midwestern coal is, in general terms, of higher sulfur content than many eastern coals. However, this disadvantage is often offset by lower mining costs and lower transportation costs due to its ready access to the inland waterways system. Nevertheless, the marketability of midwestern higher sulfur coal for export will depend upon the policies of the importing countries with regard to sulfur dioxide emissions. Current policies vary from country to country, but in most cases, their emission limits for powerplants are not as stringent as our current New Source Performance Standard for SO_2 (sulfur dioxide), and the limits for industrial plants are relatively less stringent. Generally speaking, European demand is for coal with a sulfur content between 1 and 2 percent. Illinois Basin coal, which has an average sulfur content of about 3 percent, can be blended with lower sulfur coal either here in this country or abroad in order to meet current requirements. Some European coal importers have expressed the view that with increasing world demand for steam coal, the sulfur requirements in some importing countries may be eased in future years, or in the alternative, they will adopt emission control technology as a means of extending the supply of acceptable coal.

The congestion experienced at East Coast coal ports in the past two years is likely to subside in the future as more coal-handling facilities come on line. However, if the growth in U.S. steam coal exports continues to be exponential, congestion could occur along the rail systems feeding some East Coast ports. That congestion could, in turn, have an effect upon Gulf Coast shipments.

Finally, the prospect for volume shipments of U.S. coal from the Lower Mississippi is most dependent upon the completion of the Lower Mississippi River Improvement Project, which would increase the River channel from its present authorized depth of 40 feet to 55 feet.

Peabody recently completed a study of the impact of increased steam coal exports on the Lower Mississippi project. The study indicates that the cost-benefit ratio originally developed by the Corps of Engineers actually understates the benefits, simply because the surge in coal traffic was not fully anticipated. Our analysis shows that the project's benefit-to-cost ratio will increase to 8.9 to 1 by 1986 and to 12.6 to 1 by the year 2000, considerably higher than the 8.5 to 1 ratio calculated by the Corps of Engineers.

Peabody's study also indicates that projected coal exports from the Lower Mississippi will increase from 43 million tons annually by 2000 to 86 million tons if the channel deepening is accomplished. This 100 percent increase in exports occurs because of the savings on shipping costs available to importers able to utilize larger, deep-draft colliers. We estimate that the savings will amount to between $4 and $6 per ton.

As a result of this increase in coal shipments from the

Mississippi, some 62,000 jobs would be created, including 31,000 new coal mining jobs. In economic terms, as much as $5.2 billion in total net annual benefits will result, including $1.2 billion in annual benefits directly attributable to the channel deepening project.

I would be happy to provide the Subcommittee with copies of our detailed analysis of the project which was presented to the Corps of Engineers earlier this year.

It is evident that the single most significant factor in increased coal exports through Gulf Coast ports is the completion of the proposed harbor improvement projects, especially the Lower Mississippi River project.

As evidence of Peabody's faith in the future of coal exports from the region, we are developing a coal-handling facility in St. James Parish, Louisiana, which will be capable of transhipping 10 million tons of coal annually, in its initial phase, to customers in Europe, Latin America and even the Orient. We hope to complete construction of Gateway Terminals in early 1984. The terminal will include barge fleeting areas, as well as coal storage and coal blending facilities.

SUMMARY

Mr. Chairman, we believe that there is a great opportunity present -- not only for U.S. steam coal exports overall, but for Gulf Coast exports especially. Nature has provided not only the reserves, but a natural artery through which those reserves can be transported to a growing world coal market.

There is a tremendous surge in world demand for U.S. coal. It behooves us as a nation to accommodate that demand. The reserves are there in abundance; the mining industry has the capacity and the willingness; the inland transportation system is largely in place; and we can accommodate much of that demand today through the existing Gulf Coast harbor system. But with removal of the shallow draft barrier in the Lower Mississippi and the establishment of a 230-mile deep-water river/harbor complex, the Gulf Coast can become one of the major energy exporting centers in the world.

I would be pleased to answer any questions the Subcommittee Members may have.

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IMPACT OF INCREASED U.S. STEAM COAL EXPORTS ON THE CORPS OF ENGINEERS PROPOSED PROJECT FOR DEEP DRAFT ACCESS TO THE PORTS OF NEW ORLEANS AND BATON ROUGE, LOUISIANA

AN ANALYSIS AND STATEMENT
BY
PEABODY COAL COMPANY
ST. LOUIS, MISSOURI
FEBRUARY 28, 1981

power for progress

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U.S. COAL EXPORTS
AND THE LOWER MISSISSIPPI PORT REGION

Introduction

In February 1981, the U.S. Army Corps of Engineers published a project feasibility statement on deepening the Lower Mississippi channel from Baton Rouge south to the Gulf and asked for public comments on its statement. The Corps proposes to deepen the Lower Mississippi channel to 55 feet between Mile 0 and 234, which includes the ports of New Orleans and Baton Rouge, Louisiana. The project feasibility statement concludes that a highly favorable benefit to cost ratio will result from the proposed deepening. However, the Corps' analysis did not consider increased coal exports because coal, until recently, has been a relatively minor commodity at Gulf ports.

Peabody Coal Company undertook the analysis described in the statement that follows because Peabody believed that current forecasts of U.S. coal exports through the year 2000, which were unavailable to the Corps of Engineers at the time their analysis was done, had important implications for the Lower Mississippi River project. Using the President's Interagency Coal Export Task Force report dated January 1981, Peabody employed the Task Force's projections of growth in total U.S. coal exports to assess the additional economic impact of increased coal exports through the Lower Mississippi River.

Peabody's analysis shows that the expected growth in steam coal trade will profoundly affect Lower Mississippi River exports and also have a substantial impact on the entire 17-state Mississippi River Basin area. In sum, Peabody Coal Company supports the Corps of Engineers' proposed project to deepen the Lower Mississippi River channel to 55 feet between Mile 0 and 234 and offers this statement to substantiate that inclusion of up-to-date coal trade projections further enhances the benefit-to-cost ratio of the proposed project.

The outline and summary on pages 2-6 includes an overview of Peabody's analysis and study results. The full study begins on page 7 and the bibliography is included on pages 35-38.

Outline and Summary

I. Introduction

A. Overview

1. Expanded steam coal trade in the Lower Mississippi River (mile 0-234), resulting from increased world demand for U.S. thermal coal, will bring major benefits to the region and to the nation.
2. Net annual benefits from increased trade in the Lower Mississippi River would be $5.2 billion by 2000. A total of 62,000 jobs would be created.
3. Because of coal's dependence on transportation and port infrastructure, approximately 15-25 percent of the increase in trade in the Lower Mississippi River depends upon deepening the channel to 55 feet.

B. Benefits from Coal Trade in a Deeper Channel

1. The benefits directly attributable to a deeper channel would be $1.2 billion by 2000 in net annual benefits to the economy, and a total of 31,000 potential jobs.
2. The increase in steam coal trade attributable to a deeper channel would improve the benefit to cost ratio of the project proposed by the Corps from 8.9 to 1 in 1985 to 12.6 to 1 in 2000.

C. A Proven Port Area

-- The project is also justified because the Lower Mississippi River is a proven port area and benefits would accrue to grain, ore, and other bulk cargoes as well as coal.

D. Environmental Protection

-- The project protects and enhances the environment of the Lower Mississippi River.

E. Corps of Engineers Coal Trade Projections

-- Peabody Coal shows in its detailed analysis that the Corps of Engineers projections for coal should be revised.

F. New Coal Projection

-- Peabody projects that with timely dredging, the Lower Mississippi River could control 40 percent of U.S. steam coal export trade by 2000.

G. Revised Benefits to Cost Ratios

-- Peabody believes that the increased benefits of foreign coal trade directly attributable to a deeper channel should be considered in the benefit to cost ratio of the channel deepening project. This benefit to cost ratio would be 8.9 to 1 by 1985, and 12.6 to 1 by 2000 if the increased benefits from coal attributable to a deeper channel are added in.

II. Historical and Projected U.S. and World Coal Export Market

A. Changes in World Steam Coal Demand

-- World energy planners predict that the U.S. will become a major supplier of world export steam coal. World export demand for steam coal will rise to over 450 million metric tons by 2000.

B. U.S. Supply and Share of the World Steam Coal Market

-- The U.S. has large coal reserves and the capability to expand exports. The President's Interagency Coal Export Task Force predicts that U.S. steam coal exports will increase to 26 million metric tons by 1985, 58 million by 1990, and 179 million by 2000.

C. Competitors with U.S. Export Coal

-- Political or economic events in Australia, South Africa, Canada and Poland could enhance or limit the U.S. market share of steam coal trade. The first three of these countries are making rapid improvements in the delivery and port capabilities for coal.

III. Factors Influencing U.S. Regional Shares of U.S. Coal Exports

A. Inland Transportation Networks and Port Facilities

1. East Coast ports are currently subject to traffic congestion and environmental constraints which may limit their ability to deal efficiently with a greatly expanded steam coal export trade.
2. Environmental Considerations -- The Lower Mississippi River has available accessibility to supplying regions and storage sites, and an environmentally acceptable method of disposing of dredge materials. These factors make the Lower Mississippi River particularly well suited to specializing in handling increased steam coal exports.
3. Peabody Coal Terminal -- For these reasons, Peabody Coal Company is currently considering building a coal transfer terminal on the Lower Mississippi River.

B. Economies of Scale -- Ocean Freight Rates

-- The larger the capacity of an ocean-going ship that can be loaded with coal, the lower the ocean freight rate per ton. Deepening the Lower Mississippi River to 55 feet would allow large colliers to achieve a 40 percent reduction per ton in freight charges. This reduction would keep U.S. freight charges to Europe competitive with other world traders.

C. Regional Shares of U.S. Steam Coal Export Market

-- Peabody estimates the future proportion and tonnages of steam coal exports through the U.S. coastal regions for 1985 through 2000 based on the Interagency Coal Export Task Force projections of total tonnages.

-- Two cases are proposed. Case A in which accelerated dredging does not occur. Case B in which dredging of various harbors and the Lower Mississippi River takes place by 1985.

- In Case A East Coast ports retain control of the U.S. steam coal export trade and the Lower Mississippi River ports handle 20 percent of U.S. steam coal exports as "overflow" from the East Coast.
- In Case B the Lower Mississippi River expands its market share from 25 percent to 40 percent of U.S. steam coal export trade by 2000.

IV. Economic Impact of Expanded Steam Coal Exports in the Lower Mississippi River Area

A. Impact on Foreign Trade

- In constant 1979 dollars, the value of coal exports with dredging would add $3.2 billion in U.S. foreign trade.

B. Benefits to the Domestic Economy of Coal Industry and Port Industry Expansion

1. Port Industry Benefits -- The Lower Mississippi River ports would gain $859 million in direct annual benefits by 2000 from the export of coal.
2. Coal Industry Benefits -- Direct benefits to the coal industry from exporting in the Lower Mississippi River would be $2.4 billion in 2000. Indirect benefits resulting from coal industry expansion would increase this benefit to $3.8 billion by 2000. The combined direct and indirect benefits from coal industry and port industry expansion would rise to $5.2 billion annually by 2000.
3. Benefits Attributable to a Deeper Channel -- A deeper draft in the river would result in $1.6 billion more of direct benefits to the economy and $2.6 billion more of direct and indirect benefits by 2000 than if no deepening takes place.

D. Jobs Resulting from Expanding Coal Exports in the Lower Mississippi River

- Exports in the Lower Mississippi River would result in a total of 31,000 mining jobs by 2000, if the river is deepened. A total of 62,000 potential jobs would be created. Deepening the river itself would account for 15,400 of these direct jobs and 31,000 total jobs being created.

D. Revised Benefit to Cost Ratios of a Channel Deepening Project

-- Incremental benefits which can be attributed to the channel deepening project through its direct effect on coal trade expansion should be included in the Corps of Engineers' economic analysis of the proposed project.

-- A revised analysis, obtained by adding in the incremental benefits attributable to a deeper channel and dividing by the fixed cost estimated by the Corps of Engineers, results in a benefit to cost ratio of 8.9 to 1 by 1985, 9.5 to 1 by 1990, and 12.6 to 1 by 2000 for the proposed project.

-- These revised ratios greatly strengthen the argument for deepening the Lower Mississippi River from its mouth to Baton Rouge.

U.S. STEAM COAL EXPORTS AND THE LOWER MISSISSIPPI RIVER (MILE 0-234) PORT REGION

I. Introduction

Overview

Peabody Coal Company appreciates the opportunity to add its support to the Corps of Engineers proposed project for Deep Draft Access to New Orleans and Baton Rouge.

Peabody Coal Company is the largest coal producer in the United States with over 40 mines in 10 states and an annual production during 1980 of more than 55 million tons. Peabody provides coal to many major public utilities in the U.S., but, as is typical of a midwest coal company, we have not, until recently, become involved in the international coal trade. International trade in coal, until last year, 1980, consisted primarily of metallurgical grade coal used for making coke. The world demand for U.S. thermal or steam coal was limited. However, during the past year, overseas demand for U.S. steam coal increased 640 percent over the 1979 level. The long-range growth in world steam coal demand is expected to average between 7 and 11 percent each year to 2000.

The implications of this growth in trade for the Lower Mississippi River region are great. Using the total U.S. steam coal export forecasts of the President's Interagency Coal Export Task Force, we project that coal export trade in the Lower Mississippi area will increase from 4 million metric tons in 1980 to about 12 million in 1990, and 36 million metric tons by 2000 as the Lower Mississippi River ports are called on to take up slack from Eastern coal ports. If the river is deepened, we expect these exports to increase even further, to 20 million metric tons by 1990 and 72 million metric tons by 2000. Deepening the river would mean that the Lower Mississippi River could control as much as 40 percent of the U.S. steam coal trade by 2000.

Peabody Coal Company supports the Corps of Engineers' proposed project for a 55-foot channel in the Mississippi River from Baton Rouge to the Gulf of Mexico. It is no exaggeration to say that the deepening of the channel will bring major benefits to American commerce and to the prosperity of the American people, not only from coal, but from other major commodities. Coal exports through the Lower Mississippi River could provide 62,000 jobs to the economy by 2000 and benefits of $5.2 billion annually.

Because of coal's dependence on the efficiency of transportation and port infrastructure for its competitiveness in the world market, approximately 15-25 percent of the total increase in trade in the Lower Mississippi River depends upon deepening the channel to 55 feet.

Benefits to Coal Trade in a Deeper Channel

The Corps of Engineers has estimated that the "Tentatively Selected" project would reap a net annual benefit of $787 million. This net annual benefit virtually excludes coal, which was a very small factor in trade in 1976. Peabody estimates that by the year 2000 coal exported through the Lower Mississippi River could provide $5.2 billion of annual benefits to the economy and a total of 62,000 jobs.

The benefits from port industry and coal industry expansion which are directly attributable to a deeper channel we estimate would amount to $1.6 billion in annual benefits by 2000. And a total of 31,000 potential jobs, 15,000 mining jobs, would be the direct result of a deeper channel.

The increase in steam coal trade attributable to a deeper channel would improve the benefits to cost ratio of the proposed project from 8.9 to 1 in 1985 to 12.6 to 1 in 2000.

The deepening of the river would make possible expanded trade in a variety of dry bulk and liquid bulk commodities and the achievement of substantial economies of scale by allowing large ships to navigate the Mississippi River system as far upriver as Baton Rouge. American grain and coal could compete more favorably in the world market with the advantages that would accrue from lowered freight rates and more efficient handling of bulk commodities.

The results would be: a more favorable balance of trade, a nation more secure in its economic alliances, and a world less dependent upon the OPEC energy cartel.

A Proven Port Area

New Orleans-Baton Rouge is already a substantial and proven port. New Orleans is the second largest U.S. port in waterborne tonnage and the largest grain port in the world. The Lower Mississippi River is a year-round port area for loading bulk cargoes. The abundant natural resources of the Mississippi River Basin find their most obvious outlet in the Lower Mississippi River, where the converging systems of arterial inland waterways and major railroads provide efficient links between production areas, ports, and domestic and foreign customers. The Lower Mississippi River is the only port area which has convenient and optional inland transportation links to all the major coal and grain producing areas of the country, including for coal, east Kentucky, west Kentucky, the Illinois Basin, southern Indiana, and the Western fields; for grain, Kansas, Nebraska, Iowa, Illinois, and the Ohio Basin. The Mississippi River system touches 17 states and one-third of the citizens of the United States. For these reasons, we feel that the public expenditure necessary to improve the foreign trade potential of the Lower Mississippi River ports is well justified.

Environmental Protection

It is especially gratifying that the project proposed by the Corps of Engineers has been planned creatively to avoid environmental risks and to mitigate some of the man-made and natural damage of the past. That significant national economic benefits can be accomplished while protecting wildlife and enhancing the natural marshlands of the beautiful Louisiana Delta makes this project particularly appealing.

Corps of Engineers' Coal Trade Projections

The Corps of Engineers has documented (based on very conservative estimates of trade growth) an attractively high 8.5 to 1 benefit to cost ratio from deepening the river channel. These calculations, however, do not take into consideration the relatively new demand for exported steam coal. And these benefits are based primarily on dry bulk movements of grain. It is understandable that coal was not closely examined in the Corps' analysis, since in 1976 (the base year for projections) coal represented only 4 percent of the total volume of dry and liquid bulk commodities shipped through the Lower Mississippi River (10 million of 283.6 million tons). Most of these coal shipments -- 7 million out of 10 million tons -- went into coastwise and internal commerce. Only

2.5 million tons (less than 1 percent of total trade) went into foreign ocean-going commerce.[1]

In estimating future coal trade for the deep draft project, the Corps of Engineers used a MARAD study of commodity forecasts. In view of events since 1976, we believe that these projections are now outdated. Peabody shows in its detailed analysis that the Corps of Engineers' projections for coal should be revised.

New Coal Projections

Peabody Coal Company appreciates the opportunity presented by making these comments on the Corps of Engineers' Report to submit more realistic projections of foreign coal trade which might be expected for the Lower Mississippi over the next 20 years. The information available to us indicates that the U.S. will expand its foreign steam coal trade to well over 100 million tons by the year 2000. Within the U.S., this trade will be concentrated in two port regions: the North Atlantic (including Baltimore, Philadelphia and Hampton Roads), and the Gulf area.

With timely dredging and port expansion, we project that by the year 2000, the Gulf could control 50 percent of U.S. steam coal export trade, roughly 40 percent would exit through the Lower Mississippi River ports. If port expansion and dredging are delayed or do not occur, the New Orleans-Baton Rouge market share will decrease from 25 percent in 1980 and then will remain stable at 20 percent of the U.S. steam coal export market. Thus, the case for dredging the Lower Mississippi in terms of coal is the difference between establishing a dominant share of a very large potential world market, or accepting substantial, albeit limited, growth, as the supplier of "last resort" within the United States and losing sales to foreign competition, namely Australia, South Africa and Canada. Even the low growth estimates would add significant benefits in jobs, foreign trade and balance of payments to the Mississippi Basin area and to the nation. But the accelerated growth scenario would double the total benefits to the region providing 100 percent more jobs and income than the slower-paced process.

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[1] Figures are those used in Deep Draft Access to the Ports of New Orleans and Baton Rouge, pp. 28-29.

Revised Benefits to Cost Ratios

Our analysis shows that the increases in foreign steam coal trade which would occur as a result of timely deepening of the channel would increase the benefits to cost ratio of the proposed project to 8.9 to 1 by 1985 and 12.6 to 1 by 2000. This calculation is based on the anticipated increase in coal trade beyond what would be expected to occur anyway as a result of world demand and East Coast port congestion. Our analysis predicts that coal trade would increase the net direct benefits of the proposed project from an average of $787 million per year to as much as $1.2 billion annually by 2000. In other words, the case for deepening the Mississippi channel to 55 feet is greatly strengthened by the increases in foreign coal trade which can be expected to accrue directly from it.

II. Historical and Projected U.S. and World Coal Export Market

Changes in World Steam Coal Demand

Many nations of the world are beginning to look to the United States as a major supplier of thermal coal. Until recently, the U.S. has exported only insignificant amounts of steam or thermal coal. Excluding shipments to Canada, exports amounted to only 2.5 million tons in 1979. In 1980, steam coal exports abroad grew to 16 million tons, and including Canada, topped 26 million tons. Table 1, below, shows the comparative export volumes and destinations of U.S. steam coal for comparable periods in 1979 and 1980.

The U.S. has supplied major portions of the world's metallurgical, or coking coal, needs through harbor outlets on the East Coast for over 50 years. However, the availability of cheap oil and adequate supplies of thermal coal from domestic production or other coal exporters have, to a great extent, kept foreign buyers out of the U.S. steam coal market until this past year.

Some of the reasons U.S. coal exports surged during 1980 may be temporary. Domestic unrest and economic uncertainty in Poland, labor disputes in Australia, political sensitivity about dealing with South Africa, the Iran-Iraq War, the continued rises in oil prices including

Table 1

U.S. Steam Coal Exports & Destinations

Destination	Jan.-Dec. 1980	Jan.-Dec. 1979
North America		
Canada	10.8	11.6
Mexico	.1	.1
Total	10.9	11.7
South America		
Brazil	.1	--
Chile	.5	--
Total	.6	.1
Europe		
EEC		
Belgium/Luxembourg	1.4	.2
Denmark	1.5	.1
France	3.0	.2
Germany (Fed. Rep.)	.8	.7
Ireland	.2	.1
Italy	1.0	--
Netherlands	1.8	.1
U.K.	2.0	--
Total EEC	11.7	1.4
Non-EEC		
Finland	.3	--
Germany (Dem. Rep.)	--	.1
Greece	--	--
Portugal	--	--
Romania	.5	--
Spain	1.1	.2
Sweden	--	--
Total Non-EEC	1.9	.3
Total Europe	13.6	1.7
Asia		
Japan	1.0	.4
Korea (Rep. of)	.1	--
Taiwan	.6	--
Total	1.7	.4
Africa		
Egypt	--	.2
Grand Total	26.8	14.1
Excluding Canada	16.0	2.5

Source: U.S. Department of Commerce. Reprinted in International Coal Review, February 13, 1981.

the cost of tanker fuel, all contributed to the escalation in U.S. coal export demand. However, energy planners around the world predict that the world demand for steam coal will continue to rise dramatically from now through the end of this century. The prestigious World Coal Study (WOCOL) estimated that steam coal consumption in OECD countries[2] will increase from 740 million tons of coal equivalent[3] in 1977 to 2,650 mtce in the year 2000.[4] Much of this increase cannot be accommodated by increases in domestic production.

Import demand forecasts by country and region have been prepared by a number of eminent groups to estimate the total world demand for steam coal trade. Table 2 shows the estimated steam coal imports which will be required by nations in Western Europe and the Pacific Rim from 1985 to 2000. These nations are expected to account for 90 percent of the world market. Three estimates are compared in the table: The World Coal Study's high estimate, the recently concluded Interagency Coal Export Task Force (ICE) midpoint forecasts, and a Peabody Coal independent estimate. The estimates show that world trade in steam coal will increase roughly four-fold from 1985-2000, from around 110-140 million tons in 1985 to more than 450 million tons by 2000.

World steam coal trade is expected to average an annual growth of at least 7 percent and perhaps as much as 11 percent for the next 20 years. These forecasts clearly indicate that there are great opportunities for U.S. coal on the world market. However, converting those opportunities to actual sales will require action from both the private and public sectors.

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[2] OECD is the acronym for the Organization for Economic Cooperation and Development. Formed in 1960, a group of 24 industrialized non-centrally planned nations, OECD promotes economic growth, stability, and world trade. The members of OECD are Australia, Belgium, Canada, Denmark, Finland, France, the Federal Republic of Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

[3] mtce, or million metric tons of coal equivalent, is the standard measure of energy used by the World Coal Study. A ton of coal equivalent is a metric ton (2,205 pounds) of coal with a specific heating value (7,000 kcal/kg or 12,600 BTU/lb.). Because coals vary in heat content, more than 1 metric ton of coal is often required to produce the energy content of 1 tce. For example, the conversion factor of one mtce to short tons of a typical grade of Gulf port steam coal (11,500 BTU) is 1.2.

[4] WOCOL, Coal Bridge to the Future, Vol. I, p. 98.

Table 2

World Steam Coal Import Demand Forecasts
(Metric Tons)

	1985	1990	2000
WOCOL (High Estimate)[a]	110	222	513
Europe	81	142	291
Asia	29	80	222
Interagency Coal Export Task Force[a]	134	223	451
Europe	97	145	267
Asia	37	78	184
Peabody Coal	128	235	
Europe	84	134	
Asia	44	101	

[a] WOCOL and ICE import forecasts are the midpoints of the range of estimates cited in Table 3-8 of the Interagency Coal Export Task Force Report (Interim Report), January 1981, p. 3-20.

U.S. Supply and Share of World Steam Coal Market

The United States has exceptionally large coal reserves, and the capability of supplying coal to the export market in greater volumes than virtually any other major coal exporter. Of the major world suppliers, only the U.S. is assumed technically and economically capable of expanding exports beyond 200 mtce per year. Thus, the larger the export market becomes, the larger the U.S. share is likely to be.

Moreover, the U.S. coal industry is perceived by importing countries to be one of the few among world suppliers that is relatively free of government control. As such, the U.S. is viewed as an important source by countries wishing to diversify their coal suppliers. Foreign buyers view the competitive U.S. coal industry as a form of protection against OPEC-type pricing.

In Table 3 we have assembled, from the same groups cited in Table 2, forecasts of the amount of steam coal exports from the U.S. in the period 1985-2000. This table indicates how much of total world import demand the U.S. is expected to supply. Estimates from the National Coal Association are also given in Table 3, because they are somewhat higher than the other estimates we have seen.

Table 3

Estimates for U.S. Steam Coal Exports
Excluding Canada
(Metric Tons)

	1985	1990	2000
WOCOL (High Estimate)[a]	25	55	126
Interagency Coal Export Task Force[b]	26	58	179
National Coal Association	35	62	--
Peabody Coal	30	55	--

[a] Midpoint of the High Estimate WOCOL Study, Vol. 2, p. 512.

[b] Midpoint estimates from ICE Report, Table 6-9, converted to metric tons.

Each set of estimates was arrived at by a different process, but the totals are remarkably convergent. The forecasts cited here again include U.S. exports to Western Europe and Pacific Rim countries only. U.S. exports to Canada are excluded, because they are expected to remain stable through the period.

For the remainder of this study, we have adopted the figures of the ICE, mainly because they are the most recently published and the assumptions and data on which they are based are publicly available and widely distributed. The ICE projects that U.S. steam coal exports will increase to 26 million metric tons by 1985, 59 million by 1990, and 179 million metric tons by 2000.

Competitors with U.S. Export Coal

The foregoing seems to promise that the U.S. will enjoy a flourishing steam coal trade in the coming decades. But the fact is that although this country has a wealth of reserves to supply potential customers, and the general economic and political stability that enhances our image as a reliable long-term source of coal, our labor costs, inland transportation rates, port capacity and draft restrictions, and scheduling inefficiency all work to interfere with the competitiveness of U.S. coal. Our reliability is thrown into question because port congestion on the East Coast is causing shipping delays of four weeks or more and demurrage costs of $11-13/ton.

Meanwhile, our competitors are moving aggressively to advance their ositions in world trade. Australia, South Africa, Canada and Poland are major exporters of coal on the world market. The first three countries will comprise the major U.S. competition for markets in Western Europe and Asia through the end of this century. These countries are moving quickly to update their port facilities and harbors, to improve shipping and loading facilities, and to enlarge the world coal fleet to achieve economies of scale. For example, Port Kembla and Newcastle, coal ports in Australia which serve primarily steam coal customers, will be able to accommodate substantially larger vessels (110,000 dwt.) by mid-1982. These very large colliers can move to Europe at costs perhaps 35-40 percent below existing costs. This would make ocean freight rates from Australia roughly comparable with present U.S. freight rates to Western Europe.

South Africa, too, is expanding a major port at Richards Bay. It is expected to be completed by 1985. It will handle 150,000 dwt. vessels. This modern facility represents significant public and private investment to advance coal exports.

Canada is currently engaged in negotiations to supply $400 million of coal a year to Japan -- 5.7 million metric tons of metallurgical and 1 million metric tons of steam coal. The contract is reportedly dependent upon a $1.7 billion promise of investment in mines, railroads, ports and other facilities to enable the Japanese to load coal.

Since railroads, ports and some coal companies are government controlled in these countries, the extent of public investment is not strictly comparable with the U.S., but these events indicate a significant government commitment to the support of exporting coal.

The volatility of the world steam coal market is well reflected in the varying scenarios used by the ICE to project potential U.S. market shares based on a series of different assumptions. Table 4 gives the ICE's demand and supply comparisons for all world suppliers. It illustrates the wide potential range of the U.S. market share. The midpoint estimate has been adopted for the remainder of this study, but it is important to remember that this share could be affected greatly by both internal and external political and economic decisions which could constrain or enhance this potential share.

Table 4

U.S. Share of the Total World Steam Coal Market: Comparison of Supply and Demand Projections

(Millions of Short Tons)

	1985	1990	2000
Demand	140-166	236-280	475-565
Non-U.S. Suppliers (at any cost)			
• Australia	15-20	35-40	75-120
• Canada	4	4-10	4-24
• China	3-5	8-12	25-35
• Colombia	8	17	30
• Poland	44	55	55
• South Africa	40-50	60-70	80-100
• U.S.S.R.	1-4	1-4	4-10
	115-135	180-208	273-374
Potential U.S. Market Share			
-- Midpoint Estimate	28(18%)	64(25%)	197(38%)
-- Min-max Estimate	5-51	28-100	101-292

Source: Interagency Coal Export Task Force Report (Draft), January 1981, Table 6-9, p. 6-18.

How U.S. competitors move to capture more of the available market can greatly affect the residual demand available for U.S. steam coal. Consequently, there is a wide range among possible future U.S. export levels. Table 5, which is also taken directly from the ICE study, gives a likely scenario of projected U.S. exports based on clearly stated assumptions. These are the estimates and the assumptions employed in our analysis. However, individual actions by any one of the parties, such as port investments, contracts, political changes, etc. as noted above, could change this configuration dramatically. Other countries are moving decisively to make the public investments which will attract a greater steam coal export trade. In order to achieve its potential market share, the U.S. must also be willing to commit public resources to create the supporting structures necessary for coal export.

Table 5

Projected United States Share of the World Steam Coal Market*

	Percent			Millions of Short Tons		
	1985	1990	2000	1985	1990	2000
Worldwide	18	25	38	28	64	197
Europe	28	29	47	28	49	145
Pacific Rim	Minimal	17	25	Minimal	15	52

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*Assumptions underlying the projections are as follows:

a. The overall worldwide data are the Task Force projections. The assumptions listed below regarding South African, Australian, and Canadian distribution of exports between Europe and the Pacific Rim are considered reasonable extensions of current market factors, but are provided as working hypotheses only.

b. Poland will continue steam coal exports to Europe at the 1979 level.

c. South Africa will ship 50 percent of its coal to Europe, 50 percent to the Pacific Rim.

d. Australia will ship 80 percent of its steam coal to the Pacific Rim; 20 percent to Europe.

e. Canada will ship almost all of its coal to European buyers.

Source: ICE Study, p. I-10.

III. Factors Influencing U.S. Regional Shares of U.S. Coal Exports

Inland Transportation Networks and Port Facilities

The cost and capabilities of inland transportation and port facilities will play an important role in determining the U.S. share of the world coal market and subsequently the distribution of coal exports within the U.S.

It is for this reason that Peabody is especially interested in the U.S.Corps of Engineers Deep Draft Access Project to New Orleans and Baton Rouge. Economies of scale achievable by loading large ships in a deeper channel would help to make U.S. coal competitive in the world market. The capacity and efficiency of the river system are proven. New Orleans is the second largest U.S. port. Inland transportation linkages by rail and barge to transloading facilities are already in use for other commodities in this area. New Orleans-Baton Rouge is a large and experienced port area which can, with planning, avoid the environmental congestion and inefficiencies indicated by large demurrage charges which are now added to the price of U.S. coal in East Coast ports. The port of Hampton Roads, Virginia, currently has some 200 vessels waiting to load coal, each of which is incurring demurrage costs of up to $20,000/day. However, even if the queue were gone, Hampton Roads may not be able to handle the special large-scale storage needs of a vastly expanded steam coal trade.

Historically, over 60 percent of total U.S. coal exports have moved through East Coast ports at Hampton Roads, Baltimore, and Philadelphia. Another 30 percent moved through Great Lakes piers to Canada. Metallurgical coal exports accounted for most of the coal moved via the East Coast. Existing port handling and storage facilities were designed to handle "met" coal, a high-valued product which is often consigned in small batches from mine to railcar to ship. These facilities are not designed to handle large-volume steam coal shipments that are unloaded and held in ground storage areas before being loaded onto ships.

Environmental Considerations -- The New Orleans area, on the contrary, has available land storage sites with access to the river and many of them are located in areas of low population density. The geography of the Lower Mississippi River is particularly well suited to accomplishing an expanded steam coal export trade in an environmentally sound manner.

The reason is, according to the Corps of Engineers' draft Environmental Impact Statement on the Deep Draft project, dredge material can be disposed of and judiciously deposited to create improvements in the natural landscape of the Mississippi Deltaic area. Marshland can be created as habitat for water fowl and furbearers, and as spawning grounds for fish and shellfish. The spacing out of terminals for loading coal along tne 200-mile reach from the river's mouth to Baton Rouge will reduce pressure on the environment, noise, and the heavy congestion characteristic of the East Coast coal ports. We view these as significant advantages for the Lower Mississippi area, advantages that are augmented by the ability to ship coal by barge from the Illinois Basin at a far lower cost than rail transport.

Peabody Coal Terminal -- It is for this reason and in anticipation of the increased demand for U.S. export coal that Peabody has obtained options on two sites on the Lower Mississippi River where we are studying the feasibility of locating one or more coal transfer terminals.

Economies of Scale -- Ocean Freight Rates

An important factor in the economies of coal transportation is the size of the ocean-going vessel carrying the coal. Colliers have shown a dramatic increase in average size over the past 20 years (Tables 6 and 7). A disadvantage of all U.S. ports is that they are currently limited to ships under 80,000 dwt. Mobile and New Orleans are currently limited to 80,000 dwt. and 60,000 dwt., respectively. This limitation puts an inherent competitive burden on U.S. coal.

Our estimates of comparative freight charges to Europe indicate that deepening the channel from 40 to 55 feet, thus allowing large colliers to load to drafts corresponding to the channel depths, would result in a 40 percent reduction per ton in freight charges for 140,000 dwt. vessels. This would have the effect of keeping U.S. freight charges to Europe at a price advantage with that of Australia when Australia finishes its Port Kembla and Newcastle port renovations.

Table 6[a]

Actual and Projected Percent of Coal Trade Carried By Size of Coal-Carrying Vessel, Selected Years, 1965-1985

	Size of Vessel (1000 dwt.)				
	Under 20	20-50	50-100	Over 100	Total
Actual					
1965	59	37	4	0	100
1970	32	44	24	0	100
1975	24	31	35	10	100
Projected					
1980	18	24	37	21	100
1985	15	20	35	30	100

Table 7[b]

Dimensions of Selected Ships By Coal Carrying Capacity

Coal-Carrying Capacity (dwt.)	Overall Length (ft.)	Beam (ft.)	Draft (ft.)
40,000	630	105	35
60,000	760	105	40
100,000	910	116	48
150,000	980	133	56
200,000	1,020	150	62
Panama Canal Control Dimensions	1,000	110	40

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[a] Source: H. P. Drewry, Shipping Consultants, Ltd., Sea Trade and Transport of Coal, October 1977.

[b] Source: Maritime Administration.

Note: Both tables are from Moving U.S. Coal to Export Markets, pp. 7-3, 7-5.

Table 8 shows the comparative freight rates to Europe for 140,000 and 200,000 dwt. vessels. The greater the proportion of total tonnage a large ship can load inside the Mississippi River channel, the greater the savings it can achieve. A 140,000 dwt. ship achieves a 40 percent savings if it loads in a 55-foot rather than a 40-foot channel. Changes in the access capability of large vessels which enable them to achieve their intended economies of scale can greatly increase the competitive ability of U.S. coal and help it maintain its price advantage to Europe over Australian coal, which will be delivered from large ships and launched from deep ports.

Table 8

Comparative Steam Coal Freight Rates to Europe from New Orleans-Baton Rouge by Size of Vessel and Channel Depths

Dwt. Class Ships	40' $/Ton	50' $/Ton	55' $/Ton	% Savings 40' to 55' Depth
140,000	16.60	11.55	10.20	39%
200,000	15.65	11.35	9.95	36%

Regional Shares of U.S. Steam Coal Export Market

The Lower Mississippi River ports are well equipped to specialize in handling the steam coal trade. The Deep Draft Access project could make this trade a reality by providing an economical alternative to the present congestion on the East Coast and providing access to the increasing number of deep draft ships which seek to fully load with coal.

Table 9 gives our estimates of the future proportion and tonnages of steam coal exports through various U.S. coastal regions and ports on the assumption that total U.S. export volumes do not shift from the midpoint of the ICE forecasts. In Table 9, the ICE total tonnage estimates are allocated among the major U.S. port regions using two sets of assumptions. The assumptions comprise Case A and Case B. Case A projects that no accelerated dredging or major public expenditure for port expansion will occur. Hence, the East Coast ports will remain dominant in both the met and steam coal trade, maintaining 70-75 percent of the U.S. market through 1990. This share would fall to 60 percent by 2000 through capacity

Table 9

Projected Volume (mtce) of U.S. Steam Coal Exports (Excluding Canada) Through Various Coastal Regions/Ports[e] 1980-2000

	1980		1985		1990		2000	
	%	Tons	%	Tons	%	Tons	%	Tons
Case A[a]								
North Atlantic[b]	70	10.4	70	18.2	65	37.7	50	89.5
South Atlantic	--	--	5	1.3	5	2.9	10	17.9
Gulf	25	3.6	22	5.7	25	14.5	25	44.8
New Orleans	25	3.6	20	5.2	20	11.6	20	35.8
Mobile & Others	--	--	2	.5	5	2.9	5	9.0
West Coast	3	.5	3	.8	5	2.9	15	26.8
Total[c]	100	14.5	100	26.0	100	58.0	100	179.0
Case B[d]								
North Atlantic	70	10.4	55	14.3	40	23.2	25	44.8
South Atlantic	--	--	5	1.3	10	5.8	10	17.9
Gulf	25	3.6	35	9.1	40	23.2	50	89.5
New Orleans	25	3.6	33	8.6	35	20.3	40	71.6
Mobile & Others	--	--	2	.5	5	2.9	10	17.9
West Coast	3	.5	5	1.3	10	5.8	15	26.9
Total	100	14.5	100	26.0	100	58.0	100	179.0

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[a] Case A assumes non-accelerated export growth, normal dredging, conventional port expansion and continued dominance of steam coal trade by East Coast ports.

[b] Includes all eastern coal ports south to Hampton Roads, Virginia.

[c] Totals are the Potential U.S. Market Share Estimates of the Interagency Coal Export Task Force.

[d] Case B assumes greater reallocation of exports among the port regions because of East Coast congestion and storage problems. It also assumes an accelerated port dredging and facilities expansion program and increased willingness of foreign buyers to use higher sulfur and western coals.

[e] The Great Lakes port region is not included since all coal exported from this area goes to Canada.

constraints alone. Steam coal exports on the entire East Coast (in addition to the 60-70 million tons of met coal exports) would amount to about 20 mtce in 1985, 40 mtce in 1990 and 108 mtce in 2000. In this scenario, the Gulf region would handle about 25 percent of U.S. exports of steam coal, the Lower Mississippi River ports 20 percent. This coal would be primarily "overflow" from the extreme congestion which would have become typical on the East Coast. Conventional expansion of terminal capacities and newly-built terminals would come on line in all areas by 1985-1990, but no port dredging would have taken place. "Specialization" in steam coal handling would begin to divert business from met coal ports to the Gulf and South Atlantic by 1990-2000. Of course, if this scenario were actually to occur, the total U.S. market share might fall and the difference between Case A and Case B might increase. However, for the purposes of this analysis, we have assumed non-elastic total U.S. export volumes.

Realistically, however, this inelasticity might prove impossible to maintain in the face of absolute capacity, environmental, and infrastructure problems on the East Coast. In this case, the U.S. might be expected to lose at least the 15-25 percent difference in projected volumes between Case A and Case B in the Lower Mississippi to other traders in the world market.

Case A projects an increase in the volume of coal exports for the Lower Mississippi ports, rising from 3.6 mtce in 1980 to 5.2 mtce in 1985, and 35.8 mtce in 2000. The market share would be a consistent 20 percent.

Case B assumes that timely and accelerated dredging is underway in the Lower Mississippi River by 1985. (Other ports may also be dredged without changing this scenario as long as they and the Lower Mississippi are on the same general schedule.) Case B also assumes an increased willingness of foreign customers to buy blended and higher sulfur coals. In Case B, the ability of the Gulf and West Coast areas to specialize in efficient handling of steam coal will reduce the East Coast market share from 70 percent in 1980 to 50 percent in 1990 and 35 percent in 2000. The East Coast ports would still account for 16 mtce of steam coal export in 1985, almost 30 mtce in 1990, and over 60 mtce in 2000; but the Gulf area, particularly the Lower Mississippi ports, would grow from 8.6 mtce in 1985, to 20 mtce in 1990, to over 70 mtce in 2000. Realistically, Case B might also tend to increase the total U.S. export volume above the ICE midpoint, but this effect is not estimated here.

We assume for both scenarios that the met coal trade would continue to be concentrated almost exclusively in East Coast ports, with some overflow, as now, being handled by Mobile. Of course, the movement of coal through various ports depends upon many factors, of which port facilities is only one. Coal availability and quality, blending facilities, sulfur content, inland transportation networks and rates, long-term supply or spot terms and other factors affect the eventual port outlet for coal. But we feel that the timely dredging and expansion of the New Orleans-Baton Rouge access channel could result in this port handling over 40 percent of the U.S. export steam coal trade by the year 2000.

This demand would be partly influenced by world customers' confidence in the Gulf as a capable and efficient alternative to eastern ports, and by their perception that efforts are being made to fulfill the special needs of large steam coal customers for ground storage, blending, transloading and inland transportation infrastructures. This confidence is needed for world customers to undertake long-term contracts and joint investment ventures.

Even if port dredging does not take place immediately, but operates on a "normal" schedule, steam coal exports in the Gulf will expand to perhaps 45 mtce by 2000. In either Case A or Case B, the increase in trade will be accompanied by direct and indirect benefits at New Orleans-Baton Rouge, in the entire river system, and in the national economy in terms of jobs, industrial expansion, increased trade in manufactured goods, grain, ore and other liquid and dry bulk cargoes. National defense and economic security would be enhanced by the dual prospect of a more favorable U.S. balance of trade and the decreased vulnerability of our allies to OPEC oil. However, with the commitment of public expenditure to make the Lower Mississippi ports accessible to larger ships, the U.S. will solidify its coal export market share and will simultaneously bring benefits to a range of other commodities and to at least one-third of the citizens of the nation. The total impact of this scenario would be 100 percent greater than if the deepening project is not accomplished.

IV. Economic Impact of Expanded Coal Exports in the Lower Mississippi River Area

Impact on Foreign Trade

Assuming a program of expanded and timely dredging, we have estimated the annual throughput in the Lower Mississippi River to grow from 8.6 mtce in 1985, to 20.3 mtce in 1990, to 71.6 mtce by 2000. The short ton equivalents of these projections and their cargo values at port are shown in Table 10. In constant 1979 dollars, the coal exports through the Lower Mississippi with dredging would represent an FOB cargo value at port of $3.2 billion in 2000. This would be the value of the increased foreign trade in coal through the New Orleans-Baton Rouge area.

Benefits to the Domestic Economy of Coal Industry and Port Industry Expansion

Benefits within the domestic economy would also be extensive. They would result from both port industry and coal industry expansion. Table 10 shows in detail the impact in dollars of coal industry and port industry expansion on the national economy.

Port Industry Benefits -- The Port of New Orleans has estimated a direct benefit to the port industry of $10 per ton of coal (Table 10, column 5). This net economic benefit to the regional ports does not include the value of the cargo itself. The Lower Mississippi River ports would gain $859 million in direct annual benefits by 2000 from the export of coal. In addition, indirect benefits to the port industry have been calculated using a 1.6 multiplier developed from a sophisticated input-output analysis of the port industry which was developed for the U.S. Maritime Administration. The figure includes the benefits to direct port services, to waterborne services required in obtaining coal, and to the services required in moving coal by water to export terminals. Other effects on transportation or production are not included in the 1.6 multiplier. Column 6 of Table 10 shows the total direct and indirect benefits to the port industry by coal exports in 1985, 1990 and 2000. Total benefits with the dredging project would increase from $165 million in 1985 to $1.4 billion in 2000.

Table 10

Analysis of Direct & Indirect Economic Impact
of U.S. Steam Coal Export Expansion
Through the Lower Mississippi River
1985, 1990, 2000

Page 1 of 2

	1		2		3		4		5	
	Estimated mtce Exports		Estimated Short Tons Over Wharf[a]		Mine Value[b]		Cargo Value Price FOB Port[c]		Port Industry Net Direct Economic Benefits[d]	
	Case A	Case B	Case A	Case B	Case A	Case B	Case A	Case B	Case A	Case B
			(Million Tons)		($ Millions)		($ Millions)		($ Millions)	
1985	5.2	8.6	6.2	10.3	173.6	288.4	229.4	381.1	62	103
1990	11.6	20.3	13.9	24.4	389.2	683.2	514.3	902.8	139	244
2000	35.8	71.6	43.0	85.9	1204.0	2405.2	1591.0	3178.3	430	859

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[a] Average estimated BTU content of coal exported through New Orleans -- 1,500 BTU/lb. = 1.2 mtce.

[b] @ $28 per ton, 1979 dollars. Steam coal mine and FOB port prices are estimated from the likely mix of coal which would be exported through the Lower Mississippi using WOCOL estimated ranges for 1979. WOCOL Study, Vol. I, Table 3-1, p. 126.

[c] @ $37 per short ton, 1979 dollars. Estimated from WOCOL Study, Vol. I, Table 3-1, p. 126.

[d] The Port of New Orleans has estimated, based on MARAD statistics, that every ton of waterborne coal commerce generated $10 of direct economic benefits to the port industry. Port of New Orleans Economic Impact of the 55-Foot Channel Project for the Lower Mississippi River, October 1980.

Table 10

Analysis of Direct & Indirect Economic Impact
of U.S. Steam Coal Export Expansion
Through the Lower Mississippi River
1985, 1990, 2000

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	6 Port Industry Direct & Indirect Benefits[e]		7 Coal Industry Direct & Indirect Benefits[f]		8 Total Direct & Indirect from Coal & Port Expansion		9 Increased Direct Benefits to Whole Economy Attributable to Case B	10 Increased Direct & Indirect Benefits Attributable to Case B
	Case A ($ Millions)	Case B	Case A ($ Millions)	Case B	Case A ($ Millions)	Case B	($ Millions)	($ Millions)
1985	99.2	164.8	277.8	461.4	377.0	626.2	155.8	249.2
1990	222.4	390.4	622.7	1093.1	845.1	1483.5	399.0	638.4
2000	688.0	1374.4	1926.4	3848.3	2614.4	5222.7	1630.2	2608.3

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[e] Expansion in the port industry generates a 1.6 multiplier (excluding cargo value) of direct and indirect benefits. This multiplier was developed by the Port Authority of New York for MARAD using a sophisticated input-output analysis of the national economy. Every ton of Waterborne coal commerce generates $10 of direct benefit x 1.6 indirect effects = $16. Economic Impact of the U.S. Port Industry: An Input-Output Analysis of Waterborne Transportation, Vol. I, U.S. Department of Commerce Maritime Administration, 1978, p. 51.

[f] The average total impact multiplier for coal industry delivery to final domestic demand (direct and indirect) is 1.6. Derived from Volume II, Table 3, of the Economic Impact of the U.S. Port Industry, the input-output tables of all industries in the national economy, p. 136.

Coal Industry Benefits -- The coal industry benefits would also be great. The estimated mine value of coal in an expanded export trade with timely dredging would be $288.4 million in 1985, $683.2 million in 1990, and $2.405 billion in 2000. This mine value represents an equivalent direct benefit to the coal industry.

In addition, the total direct and indirect benefits of coal industry expansion, expressed as total delivery to final domestic demand in the MARAD study, yields a 1.6 multiplier for that industry. This figure includes the direct benefits to mining, transportation, suppliers, equipment, and services necessary to increase coal production to projected export levels. The impact of coal industry expansion, with improved dredging of the channel, could amount to $461.4 million annually by 1985, $1.093 billion by 1990, and $3.348 billion by 2000. The combined benefits of coal industry and port expansion would rise to $5.2 billion annually by 2000.

Benefits Attributable to a Deeper Channel -- The amount of benefits attributable solely to the Deep Draft project (Table 10, columns 9 and 10) is determined by subtracting the Case A estimates from Case B. Thus, a deeper draft in the river would allow for $155.8 million more of direct benefits and $249.2 million more of direct plus indirect benefits to the whole economy in 1985 than would occur without deep draft access. These figures would rise to $1.6 billion of added direct benefits and $2.6 billion more of direct and indirect benefits by 2000 attributable to the deepened channel project.

It is clear that the Deep Draft Access project will have vast impact on the potential trade in the Lower Mississippi ports area. Impact is expected to be 100 percent greater with the deeper channel than without it.

Jobs Resulting from Expanding Coal Exports in the Lower Mississippi River

Jobs in the coal industry are tied directly to the amount of annual tonnage produced. If we assume that the coal delivered for export through the Lower Mississippi River will originate on the average 50 percent from eastern Kentucky and 50 percent from the Illinois Basin, it is easy to calculate the mining jobs which will be created from the annual production figures typical of these areas. (Estimates of coal which might arise from Western fields or via slurry to the Lower Mississippi River area are omitted because it is impossible now to make a realistic guess about the extent or effects of this production.)

Table 11 shows the total mining jobs created using the coal origination assumptions above and an average annual tons per worker per year of 2,783 short tons. This average is based on annual tonnages in Eastern Kentucky and Illinois published by their respective state governments.

Case B for exports would produce a total of 3,701 mining jobs in 1985, 8,768 jobs in 1990, and 30,866 in 2000. The incremental mining jobs which might be attributed to Case B, deep draft access in the Lower Mississippi, as opposed to Case A, expansion of trade without dredging, would amount to 1,473 jobs in 1985, and 15,415 jobs in 2000.

The total potential jobs created including the impact of both the coal industry and port industry expansions on domestic employment would approximate a factor of two times the direct mining jobs. Thus, total potential jobs created by Case B would approach 7,500 in 1985, 18,000 in 1990 and would exceed 60,000 in 2000. The increments attributable to Case B would be approximately 3,000 jobs in 1985, rising to almost 31,000 in 2000 (or the equivalent of a small city).

If total projected ICE tonnage figures do not remain perfectly inelastic within the U.S. (as we have assumed), jobs attributable to Case B over Case A are likely to be lost rather than reallocated to East Coast exports unless dredging occurs. Hence a drop in total U.S. exports of 15-25 percent would correspondingly lower mining jobs and have a negative impact on other aspects of the domestic economy.

Revised Benefit to Cost Ratios of Channel Deepening Project

The two preceding sections discussed the total economic benefits of an expanded coal trade in terms of both coal industry expansion and expansion within the Lower Mississippi River port industry. We have shown that these total benefits are vast.

The major justification for the funds needed to deepen the Lower Mississippi River channel is the expanded trade which will result. There is no doubt that dredging the Lower Mississippi River would directly affect the volume and market share of U.S. coal export trade in this area. For this reason, we feel that the incremental benefits which can be attributed to coal trade expansion as a result of dredging should be included in the Corps of Engineers' economic analysis of the proposed project.

Table 11

Jobs Created by Expansion of Coal Exports in the Lower Mississippi River

	Estimated Short Tons Over Wharf		Mining Jobs Created[a]		Total Potential Jobs[b]		Increased Mining Jobs Attributable to Case B	Total Increased Potential Jobs Attributable to Case B
	Case A	Case B	Case A	Case B	Case A	Case B		
1985	6.2	10.3	2,228	3,701	4,456	7,402	1,473	2,946
1990	13.9	24.4	4.995	8,768	9,990	17,536	3,773	7,546
2000	43.0	85.9	15,451	30,866	30,902	61,732	15,415	30,830

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[a] One job = 2,783 short tons of coal export. This figure is based on 1979 annual production figures from east Kentucky and Illinois. It assumes that 50 percent of coal shipped from New Orleans will originate in east Kentucky with average 1979 production @ 2,347 short tons/man year, and 50 percent will originate from Illinois with average production @ 3,218 tons/man year. Production figures were supplied from 1979 annual reports of Kentucky and Illinois Departments of Mining and Minerals, by the Kentucky and Illinois Coal Associations. Annual Report, Kentucky Department of Mines & Minerals, December 31, 1979, p. 3. Annual Coal Report, Illinois Department of Mines & Minerals, 1979, p. 18 and 21.

[b] Indirect job multiplier is estimated to be 1.0.

The Corps of Engineers estimated that the tentatively selected plan (2B) would reap a net annual benefit of $787 million. This estimate is based on very conservative projections of trade growth. The dry bulk commodities projected are primarily grain, some ore and fertilizer. Coal is virtually excluded from the projections because in 1976, the base year for projections, coal represented only 4 percent (10 million of 283.6 million tons) of the total volume of dry and liquid bulk commodities shipped through the Lower Mississippi River. Overseas shipments of coal were even more insignificant, amounting to less than one percent of total trade (2.5 million tons).[5]

Nevertheless, even using these estimates, the Corps of Engineers documented an attractively high 8.5 to 1 benefit to cost ratio which would result from deepening the river channel. Table 12 shows the Corps of Engineers summary figures for the tentatively selected Plan 2B. The ratio of average annual incremental benefits attributable to the Plan 2B to the average annual costs is 8.5 to 1.

Table 12

Corps of Engineers Summary of Economic Analysis[a] of Tentatively Selected Plan 2B

	($ Millions)
First Costs	409.0
Average Annual Maintenance Costs	75.0
Average Annual Costs	105.2
Average Annual Benefits	892.1
Benefit to Cost Ratio	8.5
Net Benefits[b]	786.9

[a] All costs and benefits are incremental over those attributable to the existing deep-draft navigation projects in the study area.

[b] Net benefits are the differences between Average Annual Benefits and Average Annual Costs. Higher net benefits are indicative of a better plan from the standpoint of national economic development.

Source: Corps of Engineers' Report, Table 13, page 45.

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[5] Figures are derived from those cited in the Corps of Engineers' report on Deep Draft Access to the Ports of New Orleans and Baton Rouge, December 1980, Vol. I, pp. 28-29.

Table 13 shows Peabody's revised analysis. It is based on the preceding estimates of U.S. steam coal exports in the Lower Mississippi River for Case A and Case B. The analysis yields a total net annual benefit from the proposed project of $827.7 million in 1985, $891.7 million in 1990, and $1.21 billion in 2000. These incremental benefits are arrived at by adding the value of the incremental trade projected in Peabody's Case B over Case A estimates (see Tables 9 and 10) to the Corps' estimate of $786.9 million in total net benefits from Plan 2B.

A new benefit to cost ratio including coal exports can be calculated by dividing the average annual cost of the Corps' proposed plan ($105.2 million) into the average annual benefits to be achieved once coal is included. These benefits amount to $933.1 million in 1985, $997.1 million in 1990, and $1.321 billion in 2000. The new benefit to ccst ratios for Plan 2B which result are 8.9 to 1 in 1985, 9.5 to 1 in 1990 and 12.6 to 1 in 2000.

The case for coal greatly strengthens the argument for deepening the Lower Mississippi River from its mouth to Baton Rouge. America's national defense, domestic economy, foreign balance of trade, economic strength, and energy independence would be enormously enhanced. And the public expenditure needed to achieve this end would be returned nearly nine-fold in the first year the project is completed. This is a dramatic case for U.S. investment and an optimistic outlook for the American citizens who depend on the rich resources of the Mississippi River Basin.

Table 13

Revised Economic Analysis of Deep Draft Project[a]
Adding Peabody Coal Estimates
of Lower Mississippi River Foreign Coal Trade

	Case A Estimated Direct Benefit -- Coal -- w/o Deep Draft[b] ($ Millions)	Case B Estimated Direct Benefit -- Coal -- w/Deep Draft[b] ($ Millions)	Net Benefit Case B Over Case A ($ Millions)	Net Benefits from Corps of Engineers Plan 2B ($ Millions)	Net Benefits Including Foreign Coal Trade ($ Millions)	Average Annual Benefits Corps' Plan 2B ($ Millions)	Average Annual Cost Corps' Plan 2B ($ Millions)	Average Annual Benefit Including Coal with Deep Draft Project ($ Millions)	Benefit to Cost Ratio of Incremental Trade Resulting from Plan 2B
1985	62	103	41	786.9	827.9	892.1	105.2	933.1	8.9
1990	139	244	105	786.9	891.9	892.1	105.2	997.1	9.5
2000	430	859	429	786.9	1215.9	892.1	105.2	1321.1	12.6

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[a] No additional cost of Plan 2B is assumed to result from increases in foreign coal trade.

[b] @ $10 per short ton.

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STATEMENT OF GERALD H. PATRICK, PRESIDENT, ARCH MINERAL CORP., ST. LOUIS, MO.

Mr. PATRICK. I would like to get into this a little more. My name is Gerry Patrick. I'm president of Arch Mineral Corp. We have mines in Wyoming, Illinois, and Alabama.

About 2 months ago I went to Lake Tahoe for a Japanese export meeting and there I met the principals in the trading companies, the head men of the trading companies for the Japanese, and they told me they were interested in buying American coal and that they were interested in paying 15 to 20 percent to buy American coal. So I went over to Japan, and on the way over I stopped in Australia for 1 week. And I look at the Australian industry and the problems they're having and then I went up to Japan and started 1 week of negotiations with the Japanese.

I found out that they're not willing to pay a premium for American coal. Two, that they have grossly overstated their demand and their need for American coal. And this is, I think a plan that is not only in Japan, but is in our European countries. They want trading room. They want to trade. And the more people they've got and the more ports they've got and the more boats they've got, the better chance they've got to trade and make the money to lower the price of coal.

It also disturbed me that most of the coal that was shipped from Colorado, Wyoming, Utah, last year, was sold at a loss to the Japanese, to Korea, to Taiwan; at a loss, a substantial loss. Coal that costs $18 a ton to mine was being sold for $12, $14, and $16 a ton. It bothers me the way the Japanese trade. You trade with the Japanese you trade with the lead steel company. They trade mainly for the whole steel companies. It's very hard to negotiate separately.

The cement companies last year did negotiate separately but this year they're going to negotiate as an industry as a whole.

I'm concerned as an American that we have a $15 billion trade deficit with Japan and we let the Japanese outsmart us in trade all the time. I think this is wrong. I think we've done a lousy job of selling our stuff.

I'm not for terrorists, but I am for Americans selling and saying, "Hey, if you buy our stuff we want a low leverage on the other side."

The Japanese right now are cutting back on long-term contracts which they have with the Australians on iron ore. They are substantially cutting back on these contracts that were firm contracts. The Australian steel mills have not made a lot of money in selling to the Japanese. The coal companies in Australia, outside of one, Utah which is owned by General Electric, is the only one that is really making an adequate return on their coal investment to the Japanese.

Now my thing is this. I'm interested in export coal and traffic if Americans can made a profit, and if we can do a good job. We have not made a profit and we have not done a very good job in the last year or two. We have sold the Japanese, the Germans, and the Europeans a lot of crap coal. Coal that should never have left this country.

Part of the reasons for the fires and stuff is that we ship piles of slurry ponds, et cetera, to the Europeans. Now this will settle out because when they reorder again they're not going to, the Europeans and the Japanese will not order from some of the companies they have before. This has happened in the coal industry before when we have surpluses and shortages. I think we have to do a much better job of marketing our products. I think the coal companies and the railroads have both got to make money on their deal.

It kind of makes me mad to read a statement from Commissioner Nada criticizing 10, 12, 15 percent increases in the freight rates when the Toyota and stuff have had higher rate increases than we had. We've got problems, but we happen to be the best coal miners in the world. Our railroad system and our barge system is unsurpassed. We happen to be located in Wyoming on the UP railroad. We move coal from Hanna, Wyo., to Chicago, a distance of about 1,200 miles back and forth regularly, 4½ days. Senator, there is some coal in Wyoming, if you load it in a railroad car and you take it 20 miles on the track, it's on fire.

We do not understand all of what causes fires. Compaction is one of the best reasons. If you compact you're not going to have a fire. We've been storing coal for years. I happen to have been with Peabody Coal Co. when it originated the Tap Electric contract. We shipped millions of tons of coal down there without fires, barge or rail.

Senator FORD. But we've had some serious problems since July and I was interested in getting an answer to that question because it's something we need to look at and I think apparently we are looking into it and there should be ways of eliminating that problem, and your experience will be valuable.

Mr. PATRICK. It's solvable. Exporting coal to Europe is nothing new. Right after World War II, to get Europe on its feet on the Marshall plan, lots of steam coal was shipped in Victory and Liberty ships to Europe. And we had some problems at first, but the great thing about our country is we can solve our problems; in free enterprise, we can get it.

The dock situation is going to clear up itself because NW and C&O, they're getting organized. We have a lot of docks; we're going to settle down with three, or four, or five real good excellent docks in our country. We need deep harbors, but we also need long-term contracts.

If you go and talk to a Japanese and say, we can get you a better freight rate. I'm not going to go to UP railroad and ask for a better freight rate unless I've got something I can prove they can do better than they're doing now and make money on it.

I think it's very poor business for anybody to go out and start tearing down their costs and say well you're making this much profit and this is the way you ought to trade. The way you ought to trade is, hey, I've got a deal here and if we can put this together you can make more money on the deal. I think we could get our freight rates down in Utah to Long Beach if we can come up with a long-term contract, put in faster roading, make better utilization of the equipment, make it unloaded in the ships. Make it so that you have a better deal all the way through. Now if we can do that we can lower our costs, but the Japanese won't do it.

The Japanese will not sign a long-term contract and there are very few European countries who will. And before we get into a lot of these things, I don't think we ought to shoot crap. I think we ought to ask them to put up a little bit more.

The French had come out with all these figures, and he says go get them to give you a contract, and they won't do it.

Now we've got a situation right now where oil is settling out at $32, $34 a barrel. We've got another thing coming, liquefied natural gas which the Japanese, if you look at the projections of the energy growth in Japan, liquefied natural gas is higher than coal, and these are all things, and we want to be sure we develop and get some assurances they're going to use American coal.

I want to say one other thing. One of the reasons why some of this railroad equipment is available today is that the coal business in the United States is pretty lousy. The UP might not have had all the coal for export if our domestic business had been good. I think what we need more than anything to help our coal industry is a national energy policy that we stick with. The way we vacillate in our country is just horrible. One minute we've got too much oil, the next day we're short in gas and everything.

If we use the coal in this country we're making the pie that Europe—there's going to be less oil demand and the less oil demand the lower the price of oil is going to be.

In closing, I think we ought to get better organized and get some of these countries to put up and really check into exactly what the market is.

Senator **WARNER**. Your message is clear.

STATEMENT OF HARRY LaVIERS, JR., PRESIDENT, SOUTH EAST COAL CO., IRVINE, KY.

Mr. **LAVIERS**. Senator Warner, Senator Bradley, I appreciate the opportunity to represent the smaller coal operators of America here today and I want to thank you first.

My name is Harry LaViers and I am president of South East Coal Co. in Irvine, Ky. Our firm employs about 1,000 people and we move about 2 million tons of coal annually, selling a good part of it to customers in Europe and the Pacific rim countries. I sincerely appreciate this opportunity to testify before your committee today on what I believe is a matter of great importance to the American coal industry and especially to the independent coal operators.

I come before you today to speak against the efforts by the American railroad industry to obtain deregulation of the rates for transporting coal intended for export. I oppose this, first of all, because I and many others see this as just the first wedge in the railroad industry's campaign for total deregulation.

You might think that I, as an independent coal operator, would be a firm opponent of all Government regulation of business. In fact, I recognize, as do most American businessmen and women, that there is a vital need for regulation of some matters and some circumstances.

There is this need for regulation particularly when the conditions surrounding an industry are such that the free enterprise, competitive forces do not—or cannot—act as a self-regulator of that industry. The Staggers Act provides as one of its prime directives, in its title 1, that this rail act of 1980 should provide rate regulation where there is an absence of effective competition.

I suppose to you that in most parts of America, the railroads as carriers of coal do not operate in a competitive, free enterprise environment and therefore should be subject to a measure of regulation. In my own area, for example, the L&N Railroad is the only available carrier for our coal, making us completely dependent upon them for services. A similar condition holds sway in many of the coalfields of this country.

Studies have found that 85 percent of the coal that is transported by rail in the United States has no practicable alternative mode of transport. Given this situation, and the reality that the number of competing railroad companies is continually getting smaller, because of mergers, I hope you can appreciate why we in the coal industry are concerned that at least some level of regulation remain in force with regard to the rail transportation of our coal.

I also oppose these efforts to deregulate export coal because I believe it is a part of the railroad industry's campaign to institutionalize the concept of differential pricing with regard to coal haul rates. The ICC has repudiated—very wisely, I believe—differential pricing practices, but the railroad industry will not give up the fight for it. As you know, the ICC favors a fully allocated cost standard, so that each shipper pays his fair share in the cost of shipping. The railroads are opposed to this most reasonable, and in the long run, only successful way of running a private railroad system.

Representatives of the railroad industry make no bones about their desire to subsidize their less profitable freight at the expense of the coal industry. Mr. William H. Dempsey, president of the Association of American Railroads, has said that "without differential pricing, the railroads cannot expect ever to achieve an adequate revenue level."

Mr. Dempsey and others argue that coal should pay more than its fair share, because other forms of freight would be attracted away from rail transportation if their rates were not subsidized, and that this loss of business would lessen the railroads' ability to carry the coal freight it does now.

Other industries have tried differential pricing over the years, and have tried to justify it with similar arguments. But neither the practice nor the justifications will hold water. Differential pricing is contrary to the very foundations of our free enterprise, and inevitably results in damage to the industry that practices it, often from some form of government action to stop it.

The railroads do have a serious problem in competing with other carriers for certain kinds of business. But the coal industry did not cause the problem. The Government here in Washington caused the problem, by favoring those other carriers and not favoring the railroad industry to the same extent. The railroads are the only form of transportation that have to maintain their own right-of-way from their own funds.

Highways, airports, and waterways are constructed and maintained by the Government, and huge armies of Government personnel assist in keeping these forms of transportation operating smoothly. Any contributions these nonrailroad carriers make to these facilities and infrastructures do not begin to pay for them. But the railroads are completely responsible for constructing, maintaining, and operating their right-of-way, and must pass the costs of these on to their customers.

The solution to the railroads' problem—or at least one solution—rests with this either-or option. Either support the railroads, as we support the trucks and the planes and the barges, by providing Government support to their right-of-way, or develop user fees that would make all carriers pay their own way completely. I can assure my friends in the railroad industry that on the day such plans are being considered here in Washington, I'd be honored to be among the first to champion their cause. Most of us in the coal industry agree wholeheartedly that the railroads need rehabilitation and adequate financial return. We are more than willing to do our fair share in making this come about.

I know that the leaders of the railroad industry are honest businessmen, who take seriously their obligations to the free enterprise system as well as their obligations to their shareholders. But the railroad industry thinks that the coal they transport is cost insensitive, and in that they are mistaken. They think that of all their customers, we are most able to absorb the added costs or pass them on to our customers.

This is simply not the case, not even in the domestic markets. Transportation costs are already placing a huge economic burden on the coal users, and all Americans. There are already some large users of coal that are purchasing foreign coal because of the excessive cost of domestic coal transportation. Some users, such as the utilities in some States, must by law seek out the cheapest sources. Every time the rail transportation costs for domestic coal go up, it directly harms the coal companies, the coal customers, and all Americans. When those costs go up too much, they will also harm the railroad industry itself.

But if the railroad industry is wrong about the so-called cost insensitivity of domestic coals, consider how much more wrong they must be when it comes to export coal. Our American export coal is in head-to-head competition with that of countries such as South Africa, Australia, Poland, Russia, China, and others. If the price of our export coal puts our coal out of the world market because it must subsidize the American railroads and cross-subsidize other forms of freight, America's export coal enterprise will simply dry up. And when that happens, we in the coal industry, they in the railroad industry, and all of us Americans will be the losers.

We in the American coal industry may have oversold our fellow Americans about the preeminence of the American coal reserves, and the desperate need that the rest of the world has for our coals. The fact is that there are other reserves of tremendous size in other countries. There are no capitve markets for U.S. coal overseas. If we cannot furnish the coal at a competitve price, there are other countries that can, and will.

Remember too, that several of these other countries see export coal as one of their primary sources for hard currency, and have it as essential national policy to supply the coal needs of hard currency countries.

Let me repeat my firm conviction that the deregulation of export coal will be the first step in total deregulation of an industry which has captive customers, the principal one being the coal industry. Deregulation of export coal will pave the way for differential pricing practices that will damage coal first, but will damage eventually all transportation in America.

Deregulation of export coal will injure the American coal companies' ability to compete in the world market place. Deregulation of export coal will benefit the rail industry—for a short time—at the price of a weakened coal industry. And weakened coal companies will be swallowed up by larger coal companies and by energy conglomerates, who will find ways of freeing themselves of the oppressive captivity of the railroads, perhaps by championing, in their turn, the cause of interstate coal slurries and new waterways and inland port facilities, all to the eventual detriment of the railroad industry.

As one who deals daily with the export coal marketplace, I can assure you that, regardless of what the railroad industry might sincerely believe and what they may tell you in these hearings, coal is a highly cost-sensitive product everywhere in the world, and is becoming more so and not less so as the need for coal expands worldwide. There is no OPEC of the coal-producing countries. There are only competitors, many of whom have the export of coal as one of the mainstays of their economy, and all of whom will gladly watch as the American coal exporters become hobbled with increased transportation costs that will either show up in the higher cost of the coal or the lower economic well-being of the American coal exporter. The only thing the American coal exporters such as my company can do in the face of increased transportation costs is to absorb those increased costs.

But some railroad representatives may tell you Senators that deregulation may just as easily result in decreased rates rather than increased ones. They may even show you isolated examples of that having happened in some circumstances. Senators, if these rates were not going to increase, do you think the railroad industry would be staging such an intensive and expensive campaign for deregulation? An industry so entranced with the thought of differential pricing, and so committed to the notion that coal is their best source for cross-subsidizing funds, is not going to reduce their rates to us.

Senators, in conclusion, let me say that I came here today for selfish reasons. My company is a coal exporter, and I want to continue in that work. I can promise you that if the rates of export coal are deregulated, then my company will be priced out of the export coal market, along with many other American coal companies.

Senators, I am not opposed to the railroads making a good profit. I am willing to have my company pay its full and fair share toward the end of making the railroads more profitable. I am willing to go to bat for the railroads in their massive struggle against other subsidized forms of transportation. I am willing to do whatever is really necessary to assist the rail industry to become and to remain viable in the private sector of the economy. I am willing to do almost anything to help the railroads become a stronger part of our free enterprise system. But I am not willing to die for them. The deregulation of export coal could kill the American export coal industry.

Thank you. I'd like to entertain your questions if you have any.

Senator WARNER. We will start at 1:45 with Mr. Ross Workman on the subject of slurry.

Mr. Ford, do you have any questions?

Senator FORD. Let me talk just a little bit to Mr. LaViers.

Senator BRADLEY. I would like to ask one question. That is, we've had a discussion here today about whether railroads or rivers will be the best exporters of this transportation system for exporting coal in the country, and we talked primarily about the Ohio-Mississippi stream as the major coal exporters. Is that the only river system that we have to look forward to as being a major path for coal exports?

Mr. LAVIERS. Yes; I believe the drainage system of the Mississippi river as a whole——

Senator BRADLEY. Does that include the Missouri?

Mr. LAVIERS. That includes the whole area. It's the only export river because it's the only one that lies in the coalfields. But let me point out, it's not either the railroads or the river because the river movements almost invariably have a prior rail transportation to the river, and that is a very significant factor.

Mr. PATRICK. Most of the coal that Europe is going to need is going to be high-Btu, low-sulfur, low-ash coal and it's going to go by rail to Virginia. This acid rain thing is big. It's even bigger in the Scandinavian countries. They're going to want low-sulfur, low-ash Btu coal. All your coal from Australia is low sulfur, so you're going to be competing against them. You're going to be competing, I think with your better coal.

This makes a problem because American utilities are also going to be competing with the same coal and there's not a lot of real good-quality, high-Btu, low-ash coal left that can be mined at decent prices. And this is why people when they talk about tons, it bothers me because you're talking about certain quantities in coals which limits where you can ship it from.

Senator BRADLEY. You're saying that rules out western coal?

Mr. PATRICK. Western coal is too low in Btu to participate in this market. I'm talking about western coal such as Wyoming, Utah has high Btu coal just as West Virginia, low ash, low sulfur coal. It can participate, but it is 700 miles, well the freight rate from Utah to Long Beach is $26.50 in the ship. And when you're competing against Australian coal, they can put it in the ship for $12 and $14. This makes it very hard for us to compete against. But the Japanese are going to want to buy a certain percentage of coal from America for leverage purposes.

Senator BRADLEY. And there's no river system that could lower it?

Mr. PATRICK. No, sir.

Mr. LAVIERS. The Rocky Mountains cut you off.

Senator FORD. When you say $26.50 is that the transportation cost?

Mr. PATRICK. The rail rate is around $21 and the dumping charge is $5.50 to $6.50.

Senator FORD. That is exclusive of the cost of the coal itself?

Mr. PATRICK. Yes.

Senator FORD. That's over and above the cost per ton?

Mr. PATRICK. Yes, sir.

Senator FORD. Mr. LaViers, I know you've been traveling extensively developing foreign markets for your coal and that of others. Are you as convinced as your colleague here that the so-called metallurgical coal will be the basic purchase of say European markets? And can we say metallurgical and steam coal? Steam coal is not as high a quality as metallurgical coal. Will that really be the major market in the years to come?

Mr. LAVIERS. I don't believe the metallurgical market shows much growth potential. I believe the growth potential is in the steam coal section of marketing. But the quality coal that Gerry is talking about has an interlacing with metallurgical quality. The kind of coal going into southern Europe right now for example, minus 1 percent sulfur, that is in many places in America considered metallurgical coal. So I think there is a merger or an interplay between what is metallurgical one day and what is steam the other day.

The quality market and the metallurgical market generally base themselves on the same natural resource, and our movement out of eastern Kentucky down the Mississippi is of the lowest sulfur and the lowest ash of any coal leaving America.

Senator FORD. You say it's the lowest sulfur and lowest ash of any coal leaving America?

Mr. LAVIERS. We generally maintain less than six-tenths of 1 percent of sulfur. More than 13,500 Btu per pound. And that coal is moving through the gulf gateway. And we loaded six vessels to Europe with that kind of coal because some areas in Europe where the population density is very high have extremely tough air polution.

Senator FORD. Do your purchasers ask for makes of coal? Say you have a certain type of coal and they want so many cars or so many tons, and you have a certain type of coal and they want so many cars and so many tons, does that develop a problem in shipment in trying to coordinate the shipment of those type of coals based on the purchaser's desire.

Mr. LAVIERS. My predecessor from Peabody mentioned that. As a matter of fact we are loading vessels in New Orleans right now that is composed of low-sulfur coal from eastern Kentucky and high-sulfur coal from western Pennsylvania. They are being blended as they are being loaded on the vessel. In many parts of the world where population densities are very high, sulfur is a real factor in the production of electricity. And basically what we're doing is we're giving the customer the benefit of our low sulfur and the other coal producer in this particular instance that's blending with us is giving the benefit of his low price. I mean the product that he is shipping at 3½ percent sulfur, ours is less than seven-tenths. The result of the mixture in New Orleans is about 2 percent and there are places where that enables economics to be attractive, particularly in areas of high-density population.

Senator FORD. I have noticed over the years the Wyoming production of coal has increased substantially. Kentucky, as you know, has been the largest producer of coal for a good many years, and it used to be between West Virginia and Kentucky. And it has been the major producer of coal in this country. But Wyoming is creeping up on it. And the statement is eventually Wyoming may be the largest producer-State producing coal in this country.

With your statement originally that you could not produce the coal out of Wyoming that could meet the export standards, what's creating the desire for Wyoming coal? Is it the cost?

Mr **Patrick**. Wyoming coal has its natural market and its natural market is Colorado, Nebraska, Iowa, Missouri, Arkansas, Louisiana, and Texas.

Senator **Ford**. Most of it is west of the Mississippi?

Mr. **Patrick**. Yes, and it's replacing natural gas in growth and most of Wyoming has abut 8,000, 8,500 Btu, about 30 percent moisture, about 6 percent ash, about 4.5 percent sulfur. It's a very dusty coal. That coal sells for about $7 or $8 a ton and the freight weight will vary from $15 to $22 a ton. And this will go in the natural market.

Some of it went as far east as Detroit-Edison, but it would not do it today. This is where it should be used.

And another thing, sir, a ton of western coal and a ton of eastern coal should not be compared because the eastern Kentucky coal is almost equivalent to 2 tons of Wyoming coal.

Senator **Ford**. And I understand the difference there. But you're telling me that two-thirds of the cost of Wyoming coal delivered to Detroit is transportation.

Mr. **Patrick**. I'd say more than that. You can do anything with figures, but if you take Wyoming coal——

Senator **Ford**. You sell it don't you?

Mr. **Patrick**. Yes.

Senator **Ford**. What is the cost of transportation?

Mr. **Patrick**. The cost of transportation will vary on where you're going. Anywhere from $12 to $25 a ton.

Senator **Ford**. What is that? If you sell it for $6 to $8 a ton and it goes from $12 to $25, roughly $22 to get it to Detroit?

Mr. **Patrick**. Most of the coal going into Texas, the freight rate is $16 to $22, and Arkansas is about that price. In Kansas City it runs about $16 a ton.

Senator **Ford**. What about Detroit?

Mr. **Patrick**. They get it from Montana. It goes over to Duluth where it's put on the boat and hauled down there, and I think that total freight rate is about $18 or $19.

Senator **Ford**. Some of that is on water, then?

Mr. **Patrick**. Yes.

Senator **Ford**. That reduces the cost?

Mr. **Patrick**. Yes, sir.

Senator **Ford**. Can your coal mix with eastern Kentucky coal?

Mr. **Patrick**. Yes, sir. The biggest advantage that New Orleans has is just what Harry said. That you can take high grade eastern Kentucky coal and say it's worth $60 a ton and blend it with an Illinois coal that gets down near $10 and $15 a ton, and maybe come up with an acceptable product at a lower price. When they put in these big facilities down there that can blend, this is going to give them a great flexibility down there at the docks.

Senator **Ford**. They do not have the blending facilities?

Mr. **Patrick**. One or two have now. Tampa Electric has has a blending dock down there for many years. And Houston Natural is putting is one. My company, which is half owned by the Hunt brothers, are putting one in down there. The other half owned by Ashland. Ashland is interested in putting one in down there. United States Steel is.

Mr. **LaViers**. We blend our coal midstream loaded.

Mr. **Patrick**. It's hard to blend midstream.

Senator **Ford**. Do you have any trouble with the heating of coal shipping from Irvine to New Orleans?

Mr. **LaViers**. We've been shipping coal to Japan for 10 years. We never had any problem because the higher inherent rank of eastern Kentucky coal generally protects it from those problems.

Senator **Ford**. Is this Illinois six that we referred to?

Mr. **LaViers**. We move into the midwestern basin, you get into the lower ranked coals and they do have this kind of problem, however, generally I must agree with the gentleman from Peabody. If it's properly handled it's not a problem with midwestern coals.

Now far west coals, even properly handled have problems.

Senator **Ford**. You're saying the midwest coals properly handled, the heating problem should not develop?

Mr. **LaViers**. No, sir. And the blending of the two has of Kentucky, it's a major occupation and a major accounting for the large volumes that move to New Orleans. New Orleans is currently the second largest port, and 2 years ago it was not. And it's chasing right up behind Hampton Roads.

Mr. **Patrick**. It shook them up.

Senator **Ford**. I've been tracking the coal business. I've got a special interest in it as you know. But it is evident that the bloc, the Communist bloc is now attempting to sell its coal to get into the hard currency that you mentioned. You didn't come right out and say it so let's just lay it out on the table.

Mr. **LaViers**. They're going to take whatever price they have to take to get it. That is no relation to their cost at all.

They pretty much look at what our fair market prices are.

Senator **Ford**. What about this $45 billion of purchase of natural gas from Russia? There are major oil companies in this country funded in order to put that gas pipeline out of Russia into Europe. What kind of competition will that make for the coal industry? What does that do for hard dollars?

Mr. **LaViers**. It's a disaster for the coal industry. It's a disaster for the hard dollars. And it might be a disaster for my three sons who are about draft age. I don't think very much of the idea.

Senator **Ford**. We talk about the coal transportation and its cost. How much of a problem have you and your company and what knowledge you have of other companies such as yourself in the securing of equipment such as coal cars, switching engines that are necessary, how much have you gotten into that?

Mr. **LaViers**. We as you know grew up on the L&N Railroad where the problems were extremely severe in the 1973, 1974 era. The L&N railroads built, its equipment was just very low, on the order of 20 percent.

Our company and most of the other companies in our area acquired cars. We have about 800 cars, and we own 9 locomotives. Not that we wish to get into that business, but at that particular time that was our only alternative.

Now the 22-percent rate increase that you referred to has had a very material effect on the L&N's ability to move coal. The railroads are still far from in shape in move the tonnage that they should be in. The particular problem is the track. The track doesn't get in bad shape overnight and you don't fix it overnight no matter how much money you may have to spend on it. And we still, for example, through this summer, we experienced considerable problems. Not because the equipment wasn't there, but because the trains could not operate during daylight hours because they were trying to repair the track.

So in effect the L&N had to operate its available trains during the hours of darkness when crews could not work on the track. That work will go on for several more years.

[Whereupon, a recess was taken from 1:30 until 2 p.m.]

Senator **WARNER**. We apologize for being late.

Mr. **WORKMAN**. Thank you. I appreciate your adjusting the schedule to accommodate my plans, and I will forgo reading the testimony which has been previously distributed and highlight orally a few of the critical points.

Senator **WARNER**. Your entire statement will be put in the record.

STATEMENT OF ROSS WORKMAN, CHAIRMAN, BOARD OF DIRECTORS, SLURRY TRANSPORT ASSOCIATION, AND SENIOR VICE PRESIDENT, PIPELINE OPERATIONS, CONTINENTAL RESOURCES CO. WINTER PARK, FLA.

Mr. **WORKMAN**. I especially appreciate the opportunity to testify following the railroads and the opportunity to hear their commitment to free market forces because those are the things that the slurry pipeline industry is trying to bring to the transportation of coal in the United States. And if they believe as strongly in those forces as we heard this morning, I don't think we're that far apart.

We believe there is plenty of competition among coal producers and that is in the area of transportation where improved competition can be beneficial.

The evidence of that competition among coal producers is very clear in Florida where foreign coal producers are successfully competing for U.S. markets.

In 1980 utilities in Florida burned about 9 million tons of coal of which 1 million tons came from foreign sources, and the reason that it was more economical to burn foreign coal was primarily the transportation costs of the United States. The utilities, of course, have the obligation to burn the lowest costing coal available to them with reasonable security, and they found that South Africa and the Polish coal was beneficial that year, as have other utilities in other States in the past. This is not an abberration which we believe is going to go away.

Of particular concern is the development of a very large open pit mining project in Colombia, the Sara Home project being developed by the Exxon Corp., to come onstream in the mid to late 1980's. It will have a very high-quality coal, high Btu, low ash low sulfur. The kind of coal that American utilities and others want to use, and the hauling distance from Colombia to the southern coast of the United States is going to make a very favorable place to sell that coal.

The export market, much has been said about that. I won't repeat the figures. The point is that it is growing and the United States share of the export market presently depends primarily on the security premium that foreign purchasers are willing to put on U.S. coal. Willing to pay up to 40 to 60 cents per million BTU's more for U.S. coal delivered in Western Europe or in Japan than the competitive coals from South Africa or Australia. And how much of a premium they are going to be willing to continue to pay is an unknown question. And clearly cost is critical to them.

They all say that. My own efforts to develop a coal export project has brought me in contact with a number of European brokers, buyers, and users of coal, and I find them to be extremely concerned about rising railroad costs in the United States. They perceive that U.S. railroads seem to have the ability almost at will to fix their own rates. The notion of fully deregulating the transportation of export coal seems to them to be just another piece of evidence of this power and authority that the railroad industry has had. And in connection with the slurry pipelines, the fact that the slurry pipeline industry has not been able to get started in this country because of the inability to acquire right-of-way from railroads, and the railroads' successful blocking of legislation to grant a Federal eminent domain bill, or for that matter State eminent domain bills, is to Europeans continuing evidence that the transportation policies for coal, if not done by the railroads are largely biased for the railroads at the expense of other aspects of the coal industry.

Now the coal pipeline industry can help considerably, and I'd like to take a few minutes to describe how it can help reduce problems of inland transportation.

The history of this industry in the United States starts in the midfifties with development of the Ohio pipeline carrying coal to utility plants on the Great Lakes. That operated for a number of years very successfully. It took away business from the railroads and caused them to rethink their business and figure out a better way to operate and compete, and from that developed the unit train concept that enabled the railroads to cut their costs by nearly 50 percent. And having achieved that the pipeline was put in mothballs and the benefit of those unit train rates was spread not just to the powerplants served by that pipeline but all of the powerplants in America that were served by trains. So that was a very successful experience.

The next generation of coal pipelines in the United States was the Black Mesa line which has been operating in Arizona for about 11 years and it's been extremely successful technically and economically. It operates at about 99-plus percent capacity factor. It's owned and built by a sister company of the Southern Pacific Railroad. They built a pipeline to haul the coal over the railroad because the pipeline was a better way to do the job in that location.

My own company proposes to build a coal stream pipeline originating in Appalachia and the Illinois basin carrying about 55 million tons a year to utility plants in Georgia and Florida. The project will cost about $5 billion as built, if completed in the late 1980's. We estimate the savings to utility users from transportation costs of coal through the pipeline compared with transportation by rail are on the order of $12 billion in 1980 dollars over the first 20 years of the operation of the pipeline, and that is the result of the study done by A. T. Carney which estimated the rail rates that rails could charge under the Staggers Act without ICC intervention, compared those rates with the costs that would be charged for pipeline transportation under ICC regulation of the type that has been used for liquid petroleum pipelines, the only current method of pipeline regulation that seems applicable.

There are a number of other pipeline projects proposed around the country and when built they will all contribute to the solution of this inland transportation problem. I think that they will do two things in particular. One is that they will help get export coal to the port for loading at a much cheaper cost than rail transportation. In our case we have a long plan to include an export leg on the coal stream pipeline.

And in addition they will deliver coal to United States using powerplants at a lower cost and thus help preserve those U.S. markets for U.S. coal and prevent the entry of additional foreign coal into our markets.

Although these pipelines can be built without Federal monetary assistance or tax assistance, they cannot be built without Federal eminent domain, and that is especially true in the East where the railroads own their rights-of-way in fee, and did not acquire them as some western railroads did with land grants. And incidentially, those land grant railroads, when they were given those benefits to get started, they were also given the Federal right of eminent domain and they used it to acquire right of way over private lands in the West. Land which they now only have to have the, after litigation be willing to use for competing means of transportation.

We firmly believe that State eminent domain is not a solution to the problem. It is simply not workable. My own company has gone through that process in the State of Florida and I think that's instructive as to what to look forward to if you try to do it State by State. There is a State where we are the natural gas supplier to the State and have been for about 20 years. We're good corporate citizens there, we're not a stranger. The State has a growing need for coal, very high cost of electricity needs to back out the imported oil, all of the things that you would expect to engender good atmosphere for obtaining eminent domain legislation.

We fought the bill through two sessions of the Florida Legislature over the strenuous objections of the railroad industry which incidentally in Tallahassee said this was a Federal issue, and it was interstate commerce and it should be dealt with in Washington. We ended up with a bill that had a number of railroad sponsored amendments to it, and the principal one that makes it unworkable is it is not operative until every State in which the pipeline would be located also passes eminent domain bills. In other States there have been similar problems with disparate conditions attached. The Texas bill limits the contract time to 3 years. Another State may require a different time.

In summary, Mr. Chairman, I just want to express my appreciation for the opportunity to describe what pipelines can contribute to keeping U.S. coal competitive, both overseas and in domestic markets, and we believe the development of the coal slurry pipeline industry will not only be good for the coal producers and the coal users of America and the export market, but it will also be good for the railroads too.

[The prepared statement of Mr. Workman follows:]

STATEMENT OF ROSS WORKMAN, CHAIRMAN
BOARD OF DIRECTORS
SLURRY TRANSPORT ASSOCIATION

Mr. Chairman and members of the Committee, I am Ross Workman, Chairman of the Board of Directors of the Slurry Transport Association and Senior Vice President, Pipeline Operations, Continental Resources Company, Winter Park, Florida.

The purpose of my testimony before you today will be to review the market for U.S. steam coal and to discuss the important role coal pipelines, such as our proposed Coalstream Pipeline, can play both in preserving the U.S. steam coal market for U.S. steam coal and in assisting our domestic steam coal to be competitive in foreign markets. I appreciate the opportunity to appear before you today.

I. THE COAL MARKET IN WHICH U.S. COAL MUST COMPETE:

A. The European and Pacific Rim Markets:

U.S. steam coal must compete against foreign coal in at least three distinct markets: the European market, the Pacific Rim market and the U.S. market. The projected foreign market for U.S. steam coal is huge. (See Table 1). For example:

- Belgium-Luxembourg, Denmark, France, Italy, The Netherlands and West Germany used 46.1 million tons of steam coal in 1979, but are projected to use 124.2 million tons in the year 1990 -- an increase of almost 300% in 10 years.
- Japan, Korea and Taiwan used 13.9 million tons of steam coal in 1979, but are projected to use 67.9 million tons of coal in 1990 -- an increase of almost 500% in the same 10-year period.

The testimony received by this Subcommittee on November 10th and December 1st was to the effect that U.S. coal will be marketed successfully in both the European and Pacific Rim markets only if the source of the U.S. coal is reliable and the delivered cost is competitive. Our competition comes from three established coal producing nations, South Africa, Australia and Poland, and new producers such as China, Colombia and Canada. (See Table 2). The marks against our major competitors, South Africa, Poland and Australia, are present and potential governmental and labor instability. The mark against us is our higher delivered cost of coal.

My recent visits in West Germany, The Netherlands and France have convinced me that, to date, the overall supply security of U.S. steam coal is the major factor keeping the U.S. in the European steam coal market. In 1980, the delivered cost of steam coal to Europe from South Africa was $1.95/million Btu's; from Australia was $2.20/MMBtu's and from the U.S. was $2.35/MMBtu's. Similarly, during 1980, the delivered cost of steam coal to the Pacific Rim markets from Australia was $1.60/MMBtu's; from South Africa was $1.95/MMBtu's; and from the U.S. and Canada was $2.25/MMBtu's. (See Table 3).

Thus, for the present, the security of the U.S. as a source of coal has offset successfully our price disadvantages of 15 to 40 cents per million Btu's in the European market and 30 to 60 cents per million Btu's in the Pacific market. We cannot rely on this "security" premium alone in the future.

B. The U.S. Market:

That U.S. coal must compete for the foreign market is well understood. However, we must not overlook the fact that U.S. coal must also compete for the growing U.S. steam coal market as well. The focus of that competition is not the mine-mouth price of coal, but rather the delivered price of coal, which includes the cost of transporting coal to its point of use.

My company has 20 years of experience in natural gas transportation and intends to participate in the delivery of coal to the markets of Georgia and Florida. In 1980, over 31 million tons of coal were used in the two states. Included in this figure are almost one million tons of coal imported from foreign sources: 750,000 tons of steam coal were imported from South Africa by Gulf Power Company and 240,000 tons of coal were imported from Poland by Tampa Electric Company.

By 1990, the coal market of Georgia and Florida is projected to more than double to 84 million tons of steam coal. U.S. steam coal will be forced to compete for this expanded market with not only Poland and South Africa but the developing coal production capacity of South America. For example, Exxon is developing the world's largest surface mine at Cerrejon, Colombia which reportedly will be in production by the mid to late 1980's. Utilities in Florida and Georgia are under an affirmative obligation to purchase the least expensive coal available to them. Thus, our eastern coal may simply lose much of the growing Florida and Georgia market to foreign coal unless the delivered cost of U.S. coal can compete with imported coal.

II. THE ROLE OF COAL PIPELINES:

On September 19, 1980, Dr. Carrol L. Wilson, Director of the World Coal Study, testified before this Committee in a hearing on coal exports. In reporting on the concerns about the U.S. expressed by steam coal importers in Europe and the Far East, Dr. Wilson reviewed some of the fears that had been expressed to him, stating:

> "They also see a rail domination which would exclude supply by alternative systems such as slurry pipelines." (p. 262 of the transcript)

Concerns about railroad pricing strategies under the Staggers Rail Act and the general dominance of U.S. coal transportation by the railroads were expressed by several of the European witnesses who testified before this Subcommittee on November 10th, including particularly the witnesses from Belgium, France, Finland and Italy. Similar concerns were expressed on December 1st by witnesses from the Pacific Rim countries.

A. Inland Coal Transportation:

Coal pipeline systems can be an alternative to railroad transportation and can create competition in rail coal haulage rates. To date, coal pipelines have proven to be cost effective and reliable modes of transporting domestic coal in two basically intrastate systems in Ohio and Arizona. An intrastate coal pipeline that was operated for several years in Ohio by Consolidation Coal Company was mothballed in 1963 when the competing railroad dropped its coal haulage rate from $3.47/ton to $1.88/ton. Latest figures indicate that the Black Mesa Pipeline in Arizona, which is operated by an affiliate of the Southern Pacific Railroad, is delivering coal at a cost of 1.5 cents per ton-mile while the current average cost for delivering coal by unit train is 2.5 cents per ton mile.

My company proposes to build an interstate coal pipeline, which we call the Coalstream Pipeline, to deliver up to 54 million tons of coal per year 1500 miles from the Illinois Basin and the Appalachian coal fields to Florida and Georgia. (See Figure 1). A recent study of our Coalstream Project by A.T. Kearney, Inc. (May, 1981) concluded that transporting that amount of coal by pipeline rather than rail would result in an aggregate transportation savings of $12 billion in 1980 dollars for the twenty year period beginning in 1988. (See Figure 2).

In short, we are convinced, and my company has spent millions of dollars on the basis of that conviction, that interstate coal pipelines will prove to be an extremely cost effective method of transporting coal over long distances in the United States.

B. Coal Export Facilities:

Coal pipelines can play a direct beneficial role in coal exports as well. Several U.S. companies, including my own, are actively considering the development of coal slurry export facilities in which coal is moved by undersea pipeline from onshore staging areas to large colliers. (See Figure 3). Water is decanted on board ship and returned to shore for reuse. Coal can be delivered to such slurry export facilities either by coal pipeline or by railroad, truck or barge.

Such projects will help keep American coal competitive by enabling coal to be moved through uncongested ports by large ships, those in classes of 150,000 deadweight tons or larger. The per ton cost of using larger ships for coal haulage is much less than the cost for smaller ships, as Table 4 indicates. Larger vessels are expected to dominate our coal export trade beginning in the 1990's. Large ships, however, have a deep draft which cannot be accommodated in U.S. ports that generally can accommodate no larger than fully loaded 80,000 ton ships. Although some technical questions remain on the feasibility of slurry loading coal, a number of iron ore slurry shiploading facilities exist and are functioning well.

C. Foreign Interest In Developing Coal Pipelines:

Interest in applying pipeline technology to coal transportation is by no means limited to the U.S. SHV in Rotterdam has already committed funds to build a pilot plant for the slurry off-loading of coal vessels in Rotterdam. Canadian interests recently have announced that they are considering the development of a coal pipeline to transport Alberta coal to British Columbia for export. Royal Dutch Shell has studied the use of coal slurry as an inland transportation system in South Africa. Salzgitter, A.G., a company wholly-owned by the German Federal Republic, is intensively studying the use of slurry systems to move coking coal from West German ports to their steel mills in Salzgitter, about 100 miles south of Hamburg. The Panamanian government, with the assistance of a grant from the Agency for International Development, is studying slurry and other means of transshipping coal across the isthmus to circumvent the canal bottleneck and to facilitate the use of the next generation of large coal carriers that are expected to become predominant in the late 1980's.

III. NEED FOR FEDERAL EMINENT DOMAIN LEGISLATION:

Interstate coal pipelines can be built without Federal legislation that provides financial assistance, special rate structures or other such governmental assistance. Interstate coal pipelines cannot, however, be built, particularly in the eastern United States, unless Federal legislation is enacted extending the Federal right of eminent domain to interstate coal pipelines.

Faced with active railroad opposition, state legislatures cannot deal effectively with the issue of eminent domain for coal pipelines in their usual abbreviated sessions, particularly when the fundamental issues of providing essential state services are today so difficult and time consuming. These practical problems are particularly true in those states that serve merely as hosts and do not benefit directly from either the production or consumption of pipeline coal. In fact, such states may encounter legal difficulties in identifying benefits to their citizens that would support the grant of state eminent domain authority to such coal pipelines.

Similar difficulties led to the amendment of the Natural Gas Act in 1947 to grant Federal eminent domain authority to interstate natural gas pipelines; the enactment of the Cole Act in 1941 to grant Federal eminent domain authority to several interstate petroleum pipelines that now transport a large percentage of the petroleum products consumed in the Washington area; the grant of Federal eminent domain authority to the land grant railroads (Santa Fe, Union Pacific and Burlington Northern) in the 1860's; the grant of Federal eminent domain authority to interstate bridge companies and to certain interstate electric transmission projects.

Our Coalstream Pipeline simply cannot be built without legislation such as S. 1844 that has been cosponsored by 6 members of this Committee and is now pending before this Committee. Of the eleven states through which our pipeline could be built, only three grant eminent domain authority to coal pipelines --

Florida, Ohio and West Virginia. Florida's statute does not become effective until all states along our route enact eminent domain statutes for coal pipelines. West Virginia's statute contains several restrictions that render its usefulness very doubtful. Unfortunately, our efforts to focus the attention of several other state legislatures along our route on the need for state eminent domain legislation have been unsuccessful.

Our pipeline must cross the lines of 11 railroad companies a total of 170 times from West Virginia and Illinois to Florida. Given the opposition of the railroads to our project and the impossibility of obtaining state eminent domain authority, we will not be able to build our pipeline without the right of Federal eminent domain.

IV. CONCLUSION:

Mr. Chairman, U.S. coal will not be marketed successfully in either the U.S. market or foreign market unless the delivered cost of our coal is competitive. The delivered cost of coal includes both the mine-mouth price of the coal and the cost of transportation. Experience indicates that coal pipelines can assist in assuring that U.S. coal is delivered at competitive prices. Private companies stand ready and willing to build coal pipelines where the market will support them. Federal legislation will allow these interstate projects to compete in our inland coal transportation market. The competition will be good for the coal producers, good for coal consumers, good for America's workers, good for our nation's coal export trade -- and may even have beneficial effects on the nation's railroads.

Thank you very much.

TABLE 1

World Steam Coal Demand
By Selected Country
1979 - 2000
(millions of short tons)

Europe (six largest)	1979	1990	2000	Average annual growth rate 1979-2000
Belgium-Luxembourg	5.8	17.3	30.5	8
Denmark	7.6	16.1	21.9	5
France	21.0	19.0	30.5	2
Italy	2.1	39.1	50.0	16
Netherlands	2.6	15.1	35.2	13
West Germany	7.0	15.6	39.2	9
Pacific (three largest)				
Japan	2.7	48.3	108.7	18
Korea	5.9	16.1	50.6	11
Taiwan	5.3	3.5	41.4	10

Source: Midrange estimates of ICET study, p. 42

TABLE 2

World Steam Coal Supply
(millions of short tons)

Country	1979	1990	2000
U.S.	14.1	64	197
South Africa	n/a	65	90
Australia	n/a	37	97
Poland	n/a	55	55
Colombia	n/a	17	30
China	n/a	10	30
Canada	n/a	7	14
U.S.S.R.	n/a	3	7
TOTAL	77	258	520
U.S. Share (%)	18	25	38

Source: Midrange estimates of ICET study, projections, pp. 6-18

TABLE 3
Comparative Delivered Cost of Coal
(1980 $/MMBtu)

European Market

Source	Mine-Mouth Cost	Transportation Costs Inland	Transportation Costs Ocean	Total Cost
U.S.	1.65	.35	.35	2.35
Australia	1.00	.15	1.05	2.20
South Africa	1.00	.30	.65	1.95

Pacific Rim Market

Source	Mine-Mouth Cost	Transportation Costs Inland	Transportation Costs Ocean	Total Cost
U.S.	1.10	.70	.45	2.25
Australia	1.00	.15	.45	1.60
South Africa	1.00	.30	.65	1.95
Canada	1.35	.50	.40	2.25

Source: ICET Study, p. 99.

TABLE 4

Average Daily Cost of Vessels
(Dollars Per Ton)

	Ship Size (DWT)		
	60,000	100,000	150,000
*Daily Cost Per Ton ($)	.527	.405	.318

*Includes capital cost, fuel cost, vessel expenses

Source: ICET Study, p. 88

Coal Export Ship Size
(Percent of Total Fleet)

Ship Size	1980	1985	1990	1995	2000
Less than 100,000 DWT	93	75	56	48	42
Greater than 100,000 DWT	7	25	44	52	58

Source: ICET Study, p. 89

FIGURE I

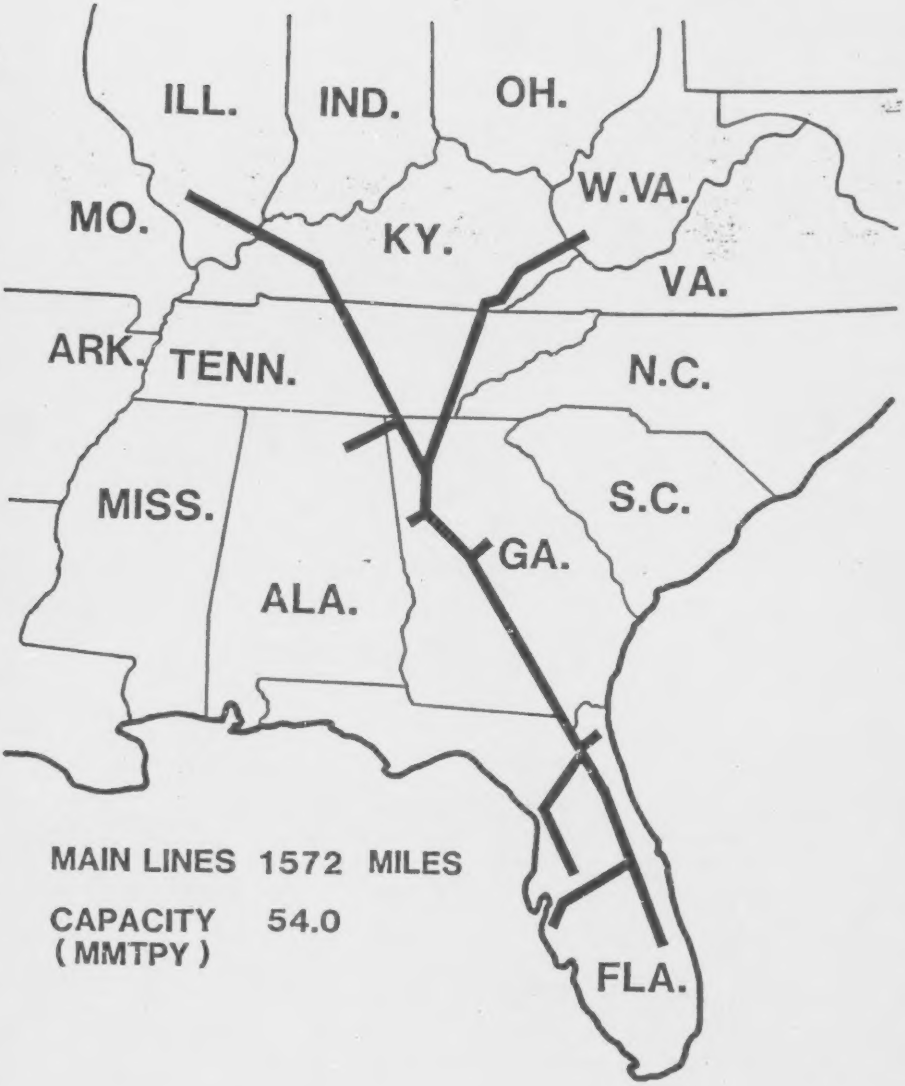
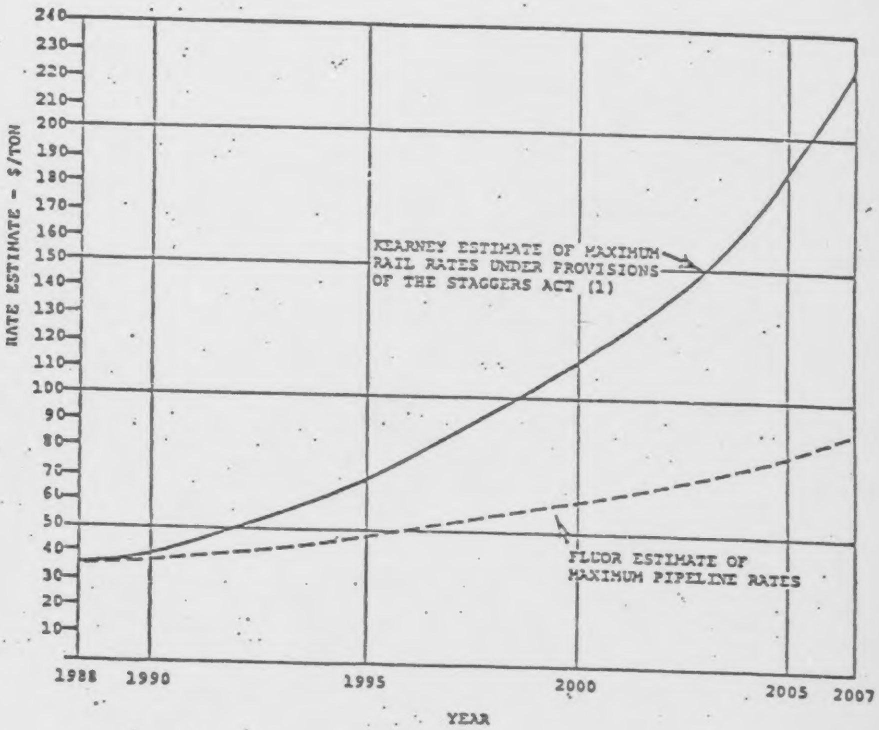

ILL.
IND.
OH.
MO.
KY.
W.VA.
VA.
ARK.
TENN.
N.C.
MISS.
S.C.
GA.
ALA.
FLA.
MAIN LINES 1572 MILES
CAPACITY 54.0
(MMTPY)

FIGURE 2

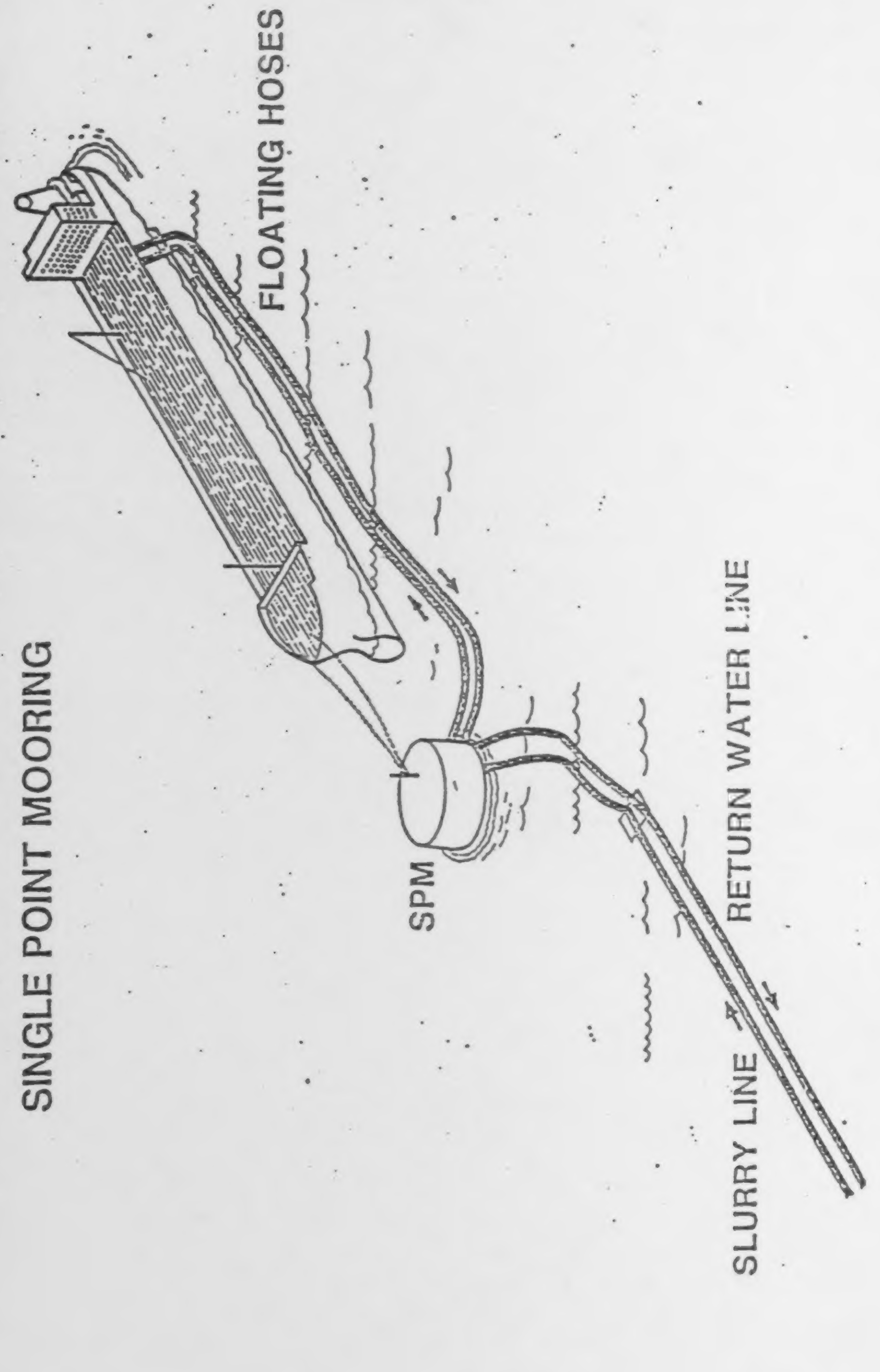
COMPARISON OF PROJECTED RAILROAD AND PIPELINE RATES FOR TRANSPORTING COAL TO THE SOUTHEAST UNDER MOST LIKELY INFLATION



NOTE: (1) WHICH ARE NOT SUBJECT TO ICC JURISDICTION IN THE RATEMAKING PROCESS.

Source: Comparison of Projected Maximum Rail and Coal Slurry Pipeline Rates for Transporting Coal to Selected Southeast Utilities. Executive Summary, A.T. Kearney, Inc., May 1981, p. 2

FIGURE 3


SINGLE POINT MOORING
FLOATING HOSES
SPM
RETURN WATER LINE
SLURRY LINE

Senator **Warner**. How do you add the water?

Mr. **Workman**. In the case of the coal stream pipeline it will originate generally within the Ohio River basin. It will take about 40 cubic feet per second of water from that basin. The natural streamflows there in low water are about 77,000 cubic feet per second.

Senator **Warner**. You're taking 40 out of 77,000?

Mr. **Workman**. Yes sir. And at the other end we remove the water from the coal, clean up the water, and the water is used in the powerplant. It makes up about one-sixth of the water that the powerplant will consume.

Senator **Warner**. What studies and efforts has the industry undertaken to develop technology to move coal in a slurry mode other than by water?

Mr. **Workman**. The water slurry is the current state-of-the-art technology. There are studies underway to move it in other liquids. Principally carbon dioxide, methanol, and oil. And studies being done by Arthur D. Little Corp. presently on the methanol, there was some testimony in a recent hearing in the House on methanol, and made the point that it was really not a solution, or does not result in a reduction of water because the manufacture of the methanol uses more water than the pipeline would use if water was used to transport the coal.

Senator **Warner**. What about the uniqueness of your product in this sense? The slurry product is a somewhat limited market. Will the market develop as the slurry coal becomes, particularly the foreign markets?

Mr. **Workman**. The foreign market depends on which type of slurry you're using. Now for what I've talked about, a long-term overland slurry, that would be pieces about the size of table sugar that would be loaded aboard ships and it would arrive in foreign markets in this preground and wet state which is different than what they've been used to seeing. We believe that does create a marketing problem. It requires developing an understanding that this is pefectly acceptable. We've gotten over that learning curve with our own utilities in Georgia and Florida. Taking them out to the Black Mason line and showing them that it works.

And in southern California, Edison has succeeded with that for 10 years. And it works and has savings and benefits.

We think that will have to be done with every user that sees a fine coal slurry.

Senator **Johnston**. Mr. Workman, what do you say to the railroad testimony to the effect that coal pipelines may not result in a lower cost of coal to the consumer because you get locked in on 20 or 30 year contracts. Thus, if they had economics that would come in later on, then the user would be locked into your contract. How can you say that it's going to be more competitive to go coal slurry, or lower priced on the average, than to go railroad?

Mr. **Workman**. Senator, the coal slurry industry, and my company in particular, expects to have its charges to shippers regulated by the Interstate Commerce Commission, probably as other pipelines are. Our charges would be based on our cost of service rather than unregulated as the railroads are. We don't expect to negotiate

30-year fixed-price contracts. We expect the prices for transportation charges to vary as the costs vary over the years.

All of our forecasts indicate that we can be extremely competitive and even in the early years. We do not believe as railroad representatives stated that we will be uncompetitive in early years, and all we're seeking is the opportunity to spend the money and see whether we're right or wrong.

Senator JOHNSTON. I noticed the chart attached to your testimony where Fluor predicts one trend line for railroad charges and Kearney predicts a much higher line for railroad charges. Is there countervailing testimony to that? Or do most experts seem to reflect that there will be great savings from coal slurry?

Mr. WORKMAN. I think everybody agrees that there will be great savings. It was stated the railroads would not have access to the numbers behind those studies and that is not true. We have offered those background numbers to all railroads. We had representatives of Family Lines come to our office in Winter Park and study that thoroughly. And when we commissioned that study we delivered the biased against the pipeline.

We asked the Fluor Co. to make all the assumptions on the high side and asked the Kearney people to make all the assumptions on rail rates on the low side, and so far although a number of railroad companies have studied the backup data but they have no comments on it, and I think it's because it is not refutable.

Senator JOHNSTON. If it is not refutable, and indeed that would be a very powerful reason for railroads to oppose coal slurry pipelines because obviously they would make less money if they had a competing method of transporting coal for much less cost. It's quite obvious they would oppose such pipelines if your figures are correct.

Then the next question is, What do you say to Mr. Dempsey's testimony that railroads have on the whole been very unprofitable? I think this year the figures he quoted were that railroads finally turned profitable for the first time in many years and the profit was only 4½ percent as against 12 percent for most industries.

What is you response to that?

Mr. WORKMAN. I'm not sure we will make them profitable, but when they were faced with competition from the Ohio pipeline they got smarter, and they developed the unit train. I think the competition is good for all businessmen and it may well teach them or force them to learn how to run their businesses better. But I really categorically reject the notion that we're going to be damaging to them by taking off with the best part of their businesses. The studies forecasts made by DIRI Incorporated shows that between now and 2003 the railroad industry will have to go from carrying 468 million tons to 1,156 million tons, if there are no pipelines built. If pipelines are built they will lose 11 percent of that on the top end. But they will still have to go from 468 million to over 1 billion, and there's lots of growth in that market.

In our own pipeline we estimate if we carried 55 million tons the railroads will have to increase their hauling to Georgia and Florida for the growth from those areas by 81 percent in the next 10 years.

Senator JOHNSTON. Some make the contention that railroads are not as unprofitable as those figures would indicate because when you look at the holding company profits as opposed to just the rail profits, the holding companies are doing very well. Is that correct?

Mr. WORKMAN. I don't profess to be an expert on railroad profitability, but I do read the same newspapers as everybody else, and see that they are in the business of buying and selling tax credits and sometimes buying tax credits, and that they are in the business of buying an airline in today's newspaper. And I do know that in California where I used to live it was the largest landowner.

And the Illinois Central Railroad advertises in the Wall Street Journal, and it's a lot more than the railroad. They have a lot of other business.

Senator JOHNSTON. Is this a zero-sum game? In other words, is there only so much coal to be transported, and the question is who transports that, or do you contend if you have coal slurry pipeline they would so improve the economics of coal transportation that the total amount of coal to be mined and therefore shipped would increase so that you would increase the total amount of coal as against which you calculate the percentage?

Mr. WORKMAN. We had a study done of our coal steam pipeline by the National Economic Research Associates and they estimated that the lower cost of transportation of the coal to Georgia and Florida would increase the amount of coal produced in those producing areas on our pipeline. Increase it by 17.3 million tons per year which would add, I think it was 4,500 new coal mining jobs.

Senator JOHNSTON. In other words the total amount of coal would increase with the coal slurry pipeline. Is there a problem if you transported everything by rail and reached all of the hoped for estimates, would you have any problem of grade crossing tie-ups and congestion by that many railroad unit trains?

Mr. WORKMAN. There was discussion earlier about the need to revamp and refurbish the rail lines. And the average cost or average speed of railroads is very slow because of that.

Unit trains——

Senator JOHNSTON. I'm not talking about the average speed. I'm talking about just the amount of congestion. One study was done in Louisiana that converted all the industry coal and required the equivalent of 30-mile-long unit trains a day in and out or a total of 60, or one train 30 miles long in and out. I don't vouch for the correctness of that figure, but the picture it conjures up is of massive tie-ups in traffic if you had that many trains crossing.

Mr. WORKMAN. We've calculated figures like that too.

Senator JOHNSTON. Is that a real problem?

Mr. WORKMAN. It is definitely a real problem because just the sheer number of the railroad cars that have to pass through those towns.

Senator JOHNSTON. Haven't I read where there have been some real improvements in the dewatering of coal so that the amount of energy it takes to get rid of the water when you get ready to burn is less?

What is the state of the art on that?

Mr. WORKMAN. The current state of the art that's in operation is in the Black Mesa Line which was built 11 years ago. Since then there have been a number of things developed in improving that. There have been no full scale plants put in place yet, but presently

EDSI is right now building a pilot plant for its operations where it is going to test these new developements and determine how much more efficient they are than the 11-year-old technology. And we do believe it's going to be quite a bit better.

Senator JOHNSTON. And you expect over the next decade or two to further increase that efficiency?

Mr. WORKMAN. Yes, and in the next decade or two we expect to see the development of technologies for burning slurry directly without dewatering at all. That is being done on an experimental basis now with densities of 70 percent, 65, 70 percent coal and the balance water.

Senator JOHNSTON. Thank you.

[Whereupon, a brief recess was taken.]

Senator WARNER. I'm going to have to ask your indulgence. The Chair is doing the very best he can to rectify the normal procedures of the Senate and the vote.

Mr. Ralph has got to get a plane, would you indulge him if he came forward and had his 10 minutes now?

Mr. VAUGTH. I also have a plane at 3:30.

Senator WARNER. I'll give you the 10 and then give him the other 10.

STATEMENT OF WILLIAM H. VAUGHT, PRESIDENT, GULFCOAST TRANSIT CO., TAMPA, FLA.

Mr. VAUGHT. My name is Bill Vaught, president of Gulfcoast Transit Co., Tampa, Fla. I'd like to express our appreciation for the opportunity to comment on transportation of coal in this country and the ability of the Nation's water carriers to contribute to this task.

I'd first like to comment real briefly on two items that came up in the morning session. One is the hot coal issue.

In the past 20 years we have carried millions of tons of coal on river barges and ocean barges and we have never had a fire in a barge. And it is our opinion that the hot coal issue today is due to the quality of the coal that some of the carriers are having placed in their barges. It is not due to the barge industry.

The second is a comment about the Japanese. We have also had a contract with the Japanese for in excess of 10 years. We have always found them to be very honorable people and never had any problems with them. We've enjoyed a good business relationship, and they've always paid their bill. I'll speak up for them. We have nothing but good to say about them.

The barge and towing industry has established an excellent reputation for being responsive to the needs of American shippers and consumers and have provided a fuel-efficient, cost-effective, and highly productive transportation service.

Fully 60 percent of the total barge traffic involves fuel, petroleum, and petroleum products. The barge and towing industry is flexible enough to respond quickly to new transportation demands. In 1973 the barge and towing industry moved 20 percent of all grain exports to oceangoing ports. By 1980 this year it increased to over 40 percent.

Not only did the barge industry double its market share but it did so during a period when the market was expanding very rapidly. The industry was able to beard and put into service the required fleet capacity and horsepower necessary to move this grain. All indications point to a potential growth rate in barge movements of coal in the coming years.

As the shipping demands for significant increases in coal transportation materializes, the industry's flexibility together with its inherent advantages will allow for the needed fleet expansion to meet growing demands.

Much debate has been focused on the administration's proposal to recover Corps of Engineers' navigation expenditures, and I would like to address that briefly.

The waterways industry strongly believes that Congress should consider the following issues in relation to the increased user fees. The need for a careful study of the ramifications on effective industries in particular, and the economy of the United States in general.

Equitable application to all competing transportation modes in order to avoid marketplace distortion and wholesale disruption of established trade patterns. Accurate identification of the various beneficiaries of a given Federal program. And recovery only of those expenditures for services required by the beneficiaries.

Consultation insured for those paying user charges on how the funds are spent by the Government. And authorization for taxing to remain with Congress and not be delegated to executive branch departments and agencies.

While the inland waterways industry moves about 12 percent of the Nation's total freight, it does so at only 2 percent of the cost. For those shippers with access to barge transportation, and 87 percent of our Nation's major cities are located on navigable waterways, it's the obvious choice for economic movement of bulk goods.

The cost advantage of barge transportaion is due to a large degree to its excellent fuel efficiency. Study after study has shown that this transportation mode moves bulk freight more cheaply than anything on wheels.

All indicators point to a dramatic increase in demand for barge capacity in the next several years. The latest traffic projections contained in the preliminary findings of the national waterways study are a case in point. The study is a 3-year effort by the Corps of Engineers to assess the capabilities of the existing waterways system to meet the projected needs and to formulate alternatives for the improvement to the system.

The Maritime Administration's mid-America port study came up with similar conclusions and projected a doubling of inland-waterborne commerce by the year 2000.

Using the methodology, or under the methodology used in this study the following barge-carried commodities are expected to experience high growth rate by the turn of the century. Grain, up 80 percent; coal, up 127 percent; petroleum products, up 75 percent; fertilizers, up 446 percent, and chemicals up 108 percent.

Since the release of the mid-American port study in May 1979 there has been an increase in the U.S. coal among foreign buyers, spurred by skyrocketing oil prices, other countries have started turning to this alternate source of energy. U.S. exports of steam coal during the first half of 1980 increased nearly eightfold compared to the first half of 1979.

A report issued last year by the world coal study forecast U.S. coal exports between 150 and 240 million tons by the year 2000. Compared with the record 65 million tons last year. Many utilities rely heavily and some rely exclusively on barge transportation for the receipt of their coal.

In Florida, two of the three gulf power plants receive all of their coal by water. One of Tampa Electric's plants receives all of its coal by water, and many other States including Illinois, Indiana, Kentudy, Michigan, Mississippi, Missouri, Ohio, Pennsylvania, and Tennessee, utility plants have received major portions of their supply of coal by barge.

Thank you.

[The prepared statement of Mr. Vaught follows:]

GULFCOAST
TRANSIT
A TECO ENERGY COMPANY

STATEMENT OF

WILLIAM H. VAUGHT

PRESIDENT OF GULFCOAST TRANSIT COMPANY

A Florida Corporation engaged in transportation of dry bulk commodities in the Gulf of Mexico, East and West Coast of the United States, Canada, Hawaii and South America.

We have transported such dry bulk commodities as coal, phosphate, pot ash, sulphur, grain, salt, coke, rice and lumber.

I have been in the water transportation business since 1958 and my company has transported in excess of 86 million tons of dry bulk commodities since its inception.

Testimony

The American Waterways Operators, Inc. is the national association representing the barge and towing industry, an industry vital to the economy and necessary in the movement of bulk raw materials of production. We appreciate this opportunity to comment on the transportation of coal in this country, and the ability of the nation's water carriers to contribute to this task.

The barge and towing industry has established an excellent reputation for being responsive to the needs of America's shippers and consumers, providing a fuel-efficient, cost-effective, and highly productive transportation service.

Fully 60 percent of total barge traffic involves fuel; petroleum and petroleum products (40 percent) and coal (20 percent). Other leading barge commodities include building materials, such as sand, gravel and cement (14 percent); grain and grain products (9 percent); chemicals (6 percent); and iron and steel products (3 percent).

The barge and towing industry is flexible enough to respond quickly to new transportation demands. For example, this industry has played an ever-increasing role in the movement of U.S. grain to export points along the Gulf of Mexico and Pacific Northwest. In 1973, the barge and towing industry moved 20 percent of all grain exports to oceangoing ports. By 1980, this share had increased to over 40 percent.

Not only did the barge industry double its market share, but it did so during a period when the market was expanding very rapidly. The industry was able to build and put into service the required fleet capacity and horsepower necessary to move this grain. In 1980, for example, 1,581 new dry-cargo barges were added to the fleet. Approximately 1,000 of these additions were grain-carrying barges, built in quick response to the growing grain export trade.

All indications point to a potential growth rate in barge movements of coal in the coming years. As the shipping demand for significant increases in coal transportation materializes, the industry's flexibility, together with its inherent advantages, will allow for the needed fleet expansion to meet growing demands.

As mentioned above, barge transportation has some key advantages that make it a most attractive mode for moving bulk cargo. From a shipper's standpoint, the most important consideration is usually cost. It costs only about seven-tenths of a cent to move a ton of cargo one mile by barge, compared to 2.6 cents by rail and over 10 cents by truck.

Much debate has been focused on the Administrations proposal to recover Corps of Engineers navigation expenditures, and I would like to touch on that subject now.

The waterways industry strongly believes that Congress should consider the following issues in relation to increased user fees:

The need for a careful study of their ramifications on affected industries, in particular, and the economy of the United States, in general;

Equitable application to all competing transportation modes in order to avoid marketplace distortions and wholesale disruption of established trade patterns;

Accurate identification of the various beneficiaries of a given federal program, and recovery only of those expenditures for services required by the beneficiaries;

Consultation ensured for those paying user charges on how the funds are spent by the government; and

Authorization for taxing to remain with Congress and not to be delagated to Executive Branch departments and agencies.

While the inland waterways industry moves about 12 percent of the nation's total freight, it does so at only 2 percent of the cost. For those shippers with access to barge transportation - and 87 percent of our nation's major cities are located on navigable waterways - it is the obvious choice for economical movement of bulk goods.

The cost advantage of barge transportation is due in large degree to its excellent fuel efficiency. Study after authoratative study has shown that this transportation mode moves bulk freight more cheaply that anything on wheels.

A wealth of previous data on modal fuel efficiency was brought together neatly last year in a special study performed by Samuel E. Eastman, a lawyer, economist, and former director of the Department of Transportation's Officer of Policy Review. The study, "Fuel Efficiency in Freight Transportation," combined new survey information with conclusions of over 30 studies of transportation efficiency, performed mainly for the Departments of Transportation and Energy over the past 10 years. It was sponsored by The American Waterways Operators, Inc., and the Water Transport Association.

Its major findings included a determination that, on the average, barges carry a ton of freight 514 miles on one gallon of fuel. The corresponding figures for rails and trucks were 202 miles and 59 miles, respectively. The study was careful to take into account the question of "circuity" (the fact that barge tows must follow winding rivers).

While these figures again confirmed the superior fuel efficiency of barging, it emphasized that all bulk transport modes make a significant contribution to the nation's transportation system, and all are deserving of full recognition as energy savers. The different modes must work cooperatively to move the products that fuel America's industries and utilities, and carry the fruits of this country's labors to domestic and foreign markets.

With all of these advantages, it's little wonder that the barge industry today is a vital part of the U.S. transportation system. In 1979, the latest year for which figures are available, barges hauled some 657 million tons of essential bulk materials. The industry has responded admirably to all the demands on it.

All indicators point to a dramatic increase in demand for barge capacity in the next several years. The latest traffic projections, contained in the preliminary findings of the National Waterways Study, are a case in point. (The study is a three-year effort by the Corps of Engineers to assess the capability of the excisting waterways system to meet projected needs, and to formulate alternative plans for improvements to the system.)

The study notes that petroleum price and supply considerations will prompt a substantial switch from oil and gas to coal. It projects a potential tripling of waterborne coal traffic between 1977 and the year 2003.

The Maritime Administration's Mid-America Ports Study came up with similar conclusions, and projected a doubling of inland waterborne commerce by the year 2000. Under the methodology used in this study, the following barge-carried commodities are expected to experience high growth by the turn of the century: grain (up 80 percent); coal (127 percent); petroleum products (75 percent); fertilizers (446 percent); and chemicals (108 percent).

Since the release of the Mid-America Ports Study in May 1979, there has been an unprecedented increase in interest in U.S. coal among foreign buyers. Spurred by skyrocketing oil prices, other countries have started turning to this alternative source of energy. U.S. exports of steam coal during the first half of 1980 increased nearly eight fold compared to the first half of 1979.

A report issued last year by the World Coal Study forecast U.S. coal exports of between 150 million and 240 million tons by the year 2000, compared with the record 65 million tons last year.

Utilities are major consumers of coal in the United States, and many utilities rely heavily on waterborne commerce to receive necessary coal supplies. The projections of the National Waterways Study indicate that the growth in coal movement on the waterways "can largely be attributed to new demand within the synthetic fuel industry as well as significant conversions from oil-fired boilers to coal by utilities, predominantly in New England and Middle Atlantic regions."

Under a high coal use scenario, the National Waterways Study projections indicate an increase in coal exports from 54 million tons in 1977 to 156 million tons by the year 2003, a tripling of tonnage. It is interesting to note that even without a high coal use assumption, exports are expected to exceed 100 million tons in 2003. Terminaling facilities for the increased export of coal from the Mississippi are in place, and can be handled by Electro-Coal Transfer Corp. at Davant, Louisiana.

As I stated before, many utilities rely heavily, and some rely exclusively, on barged transportation for the receipt of coal. In Florida, two of the three Gulf Power Company's plants receive all their coal by water. One of Tampa Electric Company's plants receives all its coal by barge.

In many other states, including Illinois, Indiana, Kentucky, Michigan, Mississippi, Missouri, Ohio, Pennsylvania, and Tennessee, utility plants receive major portions of their supply of coal by barge.

Senator WARNER. Would you gentlemen be able to accommodate the other gentleman?

Would you care to come up, sir?

STATEMENT OF HENRY DE FORREST RALPH, JR., VICE PRESIDENT, PLANNING AND ECONOMICS, COASTAL STATES ENERGY CO., HOUSTON, TEX.

Mr. RALPH. My name is Henry de Forrest Ralph, Jr. I'm vice president for planning and economics, the Coastal Co. which is a coal chemical subsidiary of the Coastal Corp., a large independent oil and gas company headquartered in Houston.

As were many of the other people, I've submitted some of the prepared testimony and I won't bother to read it to you right now.

Again, I would like to thank you, Mr. Chairman, and the committee, for allowing us to speak here.

We have coal operations in Utah where we mine 2 million tons per year. We are developing a 5-million-ton mine. Both of these are underground. We have coal holdings in Illinois and Montana, and also have a coal operation in Kentucky, in Tykana, the eastern part of Kentucky.

For some who are familiar with the problems and operations of the coal industry in transportation, and particularly in the coal movements in the West, we are exporting coal to Japan. We are the largest exporters to Japan. We exported about 1 million tons this year.

We are not here to complain about the railroad or the service that it had in the West. Our railroad is Union Pacific and we've had a relationship with them for about 15 years, starting when we built our plant in Cheyenne. And in working with those people to develop a new business for them, we have developed very good and very close relationships with those people.

Over the years we have dealt with them in part of our marketing strategy for our coal has been to provide to our customers as much help as we could in solving the transportation problems. Many of these people were converting over to coal such as cement plants in California, and they had no feel for dealing with the railroad. They had not had to do so. But we found this very beneficial in working with the railroad with our customers. We were able to get good service.

The Union Pacific vice president mentioned the transportation from Sharpe, Utah, to Los Angeles. That load-out facility is ours. We built it. It cost about $4 million, so that we could provide load-out capabilities for our mine. Our mine is located 30 miles from the closest rail point up in the mountains. We have to truck all of our coal out of there regardless of where it's going.

We have good rates, good service, but this is something that has been developed man to man, person to person, which is the way business is done, people to people. But this is all done at a time when there is a regulatory umbrella or a regulatory situation which to some extent acted as something in the background which could always be called upon. And in the last couple of years there have been some significant changes.

We have not seen any changes with our rail company, but one never knows what is going to lie in the future. And at some point their earnings are very, should be profitable. Should they see some adversity and then they might be forced to go for every dollar they could regardless of what past relationships were.

I have written testimony that deal with three areas of concern to us. One is a monopoly position of railroads in coal, and coal exports. This is particularly a problem for us because our coal, we are 750 miles, and without a coal slurry pipeline, and we don't have any barge canal. We're not up here looking for help in building a waterway to the state of Utah, but all we have is the railroad as the viable means to get the coal out. For us it's 100 percent.

We recognize the monopoly position that the railroad has and we are not necessarily opposed to the railroad having the position that it has, but we feel that regulation represents the public interest when competition for one reason or another cannot do the job and we feel there is no effective competition to the railroad here. They are restricted or restrained only by their benevolence.

We are concerned that this benevolence could be a temporal thing.

Also in terms of exports, or customers, particularly the Japanese that we deal with, they recognize the situation also, and ask what type of assurance do you have over rail rates. What happens if we sign for your particular type of coal which they like very much, it's 11,500 Btu's, it's less than six-tenths sulfur, low ash. Some of it they take and actually use it for making form to coke which we export it as steam coal and they import it as soft cooking coal.

They are concerned, as has been pointed out by others, there are other players in the game. They want our coal but only at an equivalent price, or a competitive price.

Another area we are concerned about is the recent changes in legislation and recent changes in regulatory decisions. And also now the courts are involved. And so we find that perhaps our fate is going to be decided by court actions. And we don't feel that the courts can necessarily be the best method by which a public policy will be set and carried out.

The President has expressed a concern in this area, and people in the State of Texas have experienced several occurrences that give him great concern.

So we are supportive of the National Coal Association's position and the other people's that have spoken for the shippers relative to the problems that we see.

Primarily the changes that we feel in two areas of greatest concern are establishment of market dominance criteria. Right now there appears to be no good way of determining whether or not market dominance has taken place. If some satisfaction is not reached here, our counsel tells me the rails could charge as much as 500 percent of their variable cost, which is basically they are only restricted by destroying the market.

The other area is the removal of export coal from regulatory control by the appropriate body. We were faced with this problem described earlier of trying to export the coal from our mine in eastern Kentucky. Looking at the anomaly, for domestic purposes we had one rate, and for export another rate, and at the same time we thought it was in the public interest to export coal from this country. And yet we found the railroad had determined that it was in their best interest to force all the coal through their facilities. I don't object to the railroad trying to maximize their position, but there has to be some restraint or some method whereby the public interests can at least have a hearing on it.

The other area that testimony deals with has to deal with a couple of ancillary actions or other issues which have been addressed quite a bit here today.

We did now know to what extent they would be when we started. One of these, of course, is relating to activities at the ports themselves, the deepening activities, and perhaps even more importantly the fast-track legislation whereby permits can be obtained and work can go forward. The degree of Federal money required, and that personally is not a big issue with me, but I think it needs to be developed, whereby money can be spent either by private interests or local public or in some fashion, so that if the people in Los Angeles, if it's in their interest to get that port deepened and they want to go ahead, they can go agead and do it.

And we can get those facilities in there and do what we can.

The other area has to do with one that Senator Johnston is quite interested in and that is coal slurry pipelines. I've been interested in it for many years. I've done some design work, and I've been in the Mojave powerplant and we feel we know quite a bit about pipelines, and I used to drive through Louisiana, and Senator Johnston probably remembers this. At that time you had to stop at every railroad station. Every time you came to a railroad crossing you had to stop. And I said why? My father told me there was a time when the railroads were very powerful in the State of Louisiana and they got laws passed which required that all the cars had to stop at the railroad crossings without any guards or anything of that nature.

Senator WARNER. The Senator has a very interesting——

Senator JOHNSTON. I think that was in Mr. Bobzien's testimony. Well you're going to testify.

Senator WARNER. It's a fascinating bit of information.

Senator JOHNSTON. You're talking about below Baton Rouge. If all the coal were moved on railroad lines it would tie up the grade crossings 22 hours a day.

Mr. BOBZIEN. Plus what they're being tied up already.

Senator JOHNSTON. That's a red hot political issue.

Mr. RALPH. It's also an issue in the Great Plains States. People in Colorado contemplate forcing the railroads to move 10 or 20 miles out to the east, away from where they are now because they are afraid half the population is being denied access to hospitals and things of that nature. We feel that certainly the coal slurry pipelines should be freed of restraints. I mean institutional restraints. The right of eminent domain, I think, is a reasonable type thing. They're not going to steal people's property. There are provisions in that type of an approach where people are adequately compensated.

I used to work in a gas transmission company and they had the rights or eminent domain and normally they were able to adjudicate any problems of landowners, and normally the landowners, well, you can tell where the pipeline is because the land is greener where the pipeline is. Generally the pipelines have a good reputation with the landowners.

In terms of the water use, it was pointed out, some people talk about methanol. Methanol requires four times as much water, or I should back up. It requires 4 tons of water to make 1 ton of methanol. A methanol pipeline would run 1 ton of methanol and 1 ton of coal, the same as a water pipeline would take 1 ton of water and 1 ton of coal. In our area in Utah there is a large powerplant to be built to the west of us. Its main purpose is to supply coal to California. The plant will not be built in California because they will not allow any coal powerplants there. The amount of water required for this plant which will take 10 million tons of coal, is about 50,000-acre feet per year. To get that water they had to buy from all the farmers, and so the farmers would no longer farm because they had no water. They had to sell it to the powerplant.

To move 10 million tons of coal, it would take 7,500 acre feet, so the difference is about 7 to 1 in terms of the impact on water in the western regions. And as was pointed out, the water goes into the powerplant. It's not lost, it's used. It's water that would otherwise have to be provided to the people.

Those are the main points that we had. The brochure that we have on our goal business points out rather graphically the situation relative to being captive to the railroad.

If there are any questions, I'll be glad to answer them.

[The prepared statement of Mr. Ralph follows:]

TESTIMONY BY H. DEFOREST RALPH, JR.
VICE PRESIDENT, ECONOMIC AND PLANNING,
COASTAL STATES ENERGY COMPANY, BEFORE THE
U.S. SENATE ENERGY AND NATURAL RESOURCES
COMMITTEE, SUBCOMMITTEE ON ENERGY AND
MINERAL RESOURCES - DECEMBER 3, 1981

I want to thank Chairman Warner and the other members of the Subcommittee for giving me the opportunity to discuss some of the major problems my company encounters in the business of exporting Western U.S. coal. Coastal was one of the first companies to export Western coal off the U.S. West Coast at the Port of Long Beach, California, in October of 1980. In 1981, we will export approximately one million net tons of coal to markets in the Far East via the U.S. West Coast. Projections for the future have become increasingly optimistic. Therefore, we feel particularly qualified to comment on this matter, given our history of involvement and current activities in the industry.

Before proceeding to the main part of my testimony today, I want to make it clear that we are having no significant problems at present in moving our western coal for export. At present volume levels, the rail and port systems are working well; and we have only occasional coordination problems. Similarly, we do not have concern for the near-term future (that is, for one to two years), as we believe that the present systems are adequate for a modest amount of increased capacity. We do have concerns for the medium and longer-range future and with respect to certain regulatory aspects which I will discuss.

In my testimony today, I will show that:

(1) The railroads possess substantial market dominance over coal transportation;

(2) This market dominance is more prevalent regarding the transportation of coal for export than to any other Market (i.e., utility, steel, industrial ...) and that this market dominance exists at its most powerful level

REGARDING THE TRANSPORTATION OF EXPORT COAL PRODUCED IN THE WESTERN U.S.;

(3) THE EMPHASIS ON RAIL COSTING METHODOLOGIES HAS BEEN GREATLY HEIGHTENED BY THE STAGGERS RAIL ACT AND CERTAIN INEQUITIES PERTINENT THERETO ARE IN NEED OF CORRECTION;

(4) LEGISLATION (AMENDING THE STAGGERS RAIL ACT OF 1980 - PUBLIC LAW 96-448) IS REQUIRED TO ENSURE THAT THE PROTECTION AFFORDED RAIL CAPTIVE SHIPPERS IN THE STAGGERS RAIL ACT IS CORRECTLY IMPLEMENTED BY THE INTERSTATE COMMERCE COMMISSION ("ICC");

(5) GOVERNMENT ASSISTANCE IS NEEDED REGARDING DREDGING AND FAST TRACK PERMITTING; AND

(6) LEGISLATION IS REQUIRED TO GRANT FEDERAL EMINENT DOMAIN FOR INTERSTATE COAL SLURRY PIPELINES, STIMULATING EFFECTIVE COMPETITION TO RAILRAODS FOR THE TRANSPORTATION OF COAL.

ALL OF THE ABOVE SERVE TO DIMINISH PRIVATE SECTOR ACTIVITY AND DECREASE THE COMPETITIVENESS OF U.S. COAL IN THE WORLD MARKET.

RAILROADS POSSESS SUBSTANTIAL MARKET DOMINANCE OVER COAL TRANSPORTATION

COAL SHIPPERS HAVE HISTORICALLY DEPENDED UPON THE RAILRAODS TO TRANSPORT MOST OF THEIR PRODUCTS TO MARKET FROM MINE. THE TRANSPORTATION OF COAL BY RAIL HISTORICALLY HAS BEEN RECOGNIZED AS A CLASSIC EXAMPLE OF MONOPOLIZATION. THE NEED FOR PROTECTION OF CAPTIVE SHIPPERS FROM RAIL MONOPOLIZATION BY REGULATION HAS ALSO BEEN HISTORICALLY RECOGNIZED -- THAT IS, UP UNTIL NOW.

THE NATIONAL COAL ASSOCIATION, INC. ("NCA") COMPLETED A STUDY OF CAPTIVE COAL SHIPMENTS BY RAIL IN MAY OF 1979. THAT STUDY SHOWS THAT THERE IS VERY LITTLE OR NO COMPETITION FOR THE MOVEMENT OF COAL.

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IN FACT, EIGHTY-FIVE PERCENT OF ALL COAL PRODUCED IN THE U.S. AND SHIPPED VIA RAIL WAS CAPTIVE. IN MANY CASES, RAIL TRANSPORT IS THE ONLY VIABLE FORM OF TRANSPORTATION. THE NEXT BEST TRANSPORTATION ALTERNATIVE WOULD COST COAL SHIPPERS ALMOST 300% ABOVE THEIR AVERAGE RAIL COST.

EXPORT COAL TRANSPORTATION IS MOST SUBJECT TO RAIL MARKET DOMINANCE

OF ALL THE MARKETS EXAMINED IN THE NCA STUDY (UTILITY, STEEL, INDUSTRIAL, EXPORT), THE EXPORT MARKET WAS SHOWN TO HAVE THE HIGHEST PERCENT CAPTIVITY TO RAIL OF ALL -- 93% CAPTIVE.

TRANSPORTATION OF WESTERN U.S. COAL FOR EXPORT SUFFERS THE HIGHEST DEGREE OF RAIL MARKET DOMINANCE

THE WESTERN COAL PRODUCING STATES (STATES WEST OF THE MISSISSIPPI RIVER) WERE FOUND MOST VULNERABLE TO RAIL CAPTIVITY - 98%. RESTRICTED ACCESS TO WATERWAYS, HIGHWAYS AND LOADPORTS; TYPICALLY REMOTE MINE LOCATIONS FROM RAILHEADS; THE CHARACTERISTICALLY GREAT DISTANCES FROM RAILHEADS TO LOW PORTS AND THE LARGE QUANTITY SHIPPED ARE ALL CONTRIBUTING FACTORS.

THE U.S. STEAM COAL EXPORTED OFF THE WEST COAST TODAY IS PRODUCED IN UTAH, COLORADO AND NEW MEXICO. ONE OF COASTAL'S RAILHEADS, LOCATED ON THE UNION PACIFIC RAILROAD ("UP") IN SHARP, UTAH, IS THE WESTERN-MOST RAILHEAD EMPLOYED TODAY IN LOADING TRAINS WITH COAL FOR EXPORT VIA THE U.S. WEST COAST. RAIL DISTANCES FROM THE RAILHEAD TO THE LOADPORTS AT LOS ANGELES AND LONG BEACH, CALIFORNIA, ARE 728 AND 723 MILES, RESPECTIVELY. THE RAILROADS ARE THE ONLY WAY WE CAN EXPORT OUR COAL. ALTERNATIVES ARE LOCATED FURTHER AWAY, LEAVING THE RAILROADS AS THE ONLY ECONOMICAL MODE OF TRANSPORTATION.

WE FEEL THAT A SIGNIFICANT POINT RELATED TO THE MARKET DOMINANCE BY RAIL OF THE TRANSPORTATION OF WESTERN U.S. EXPORT COAL IS THE ~~BLATANT~~

ABSENCE OF CONTRACTS FOR TRANSPORTATION BETWEEN CARRIERS AND SHIPPPERS. WHILE CONTRACTS EXIST ON THE EAST COAST, AND U.S. GULF COAST, THERE ARE NONE TO THE U.S. WEST COAST.

LEGISLATIVE AMENDMENTS TO THE STAGGERS RAIL ACT ARE REQUIRED

THE STAGGERS ACT BALANCED RAILROAD REVENUE NEEDS AGAINST CONTINUED PROTECTION OF CAPTIVE SHIPPERS FROM EXCESSIVE RATES. LEGISLATION IS NOW NEEDED TO AMEND THE STAGGERS RAIL ACT TO ENSURE THAT THIS DELICATE BALANCE IS CORRECTLY IMPLEMENTED BY THE INTERSTATE COMMERCE COMMISSION.

COASTAL IS GRAVELY CONCERNED WITH TWO RECENT ICC ACTIONS THAT REFLECT THE COMMISSION'S APPARENT INABILITY TO COMPREHEND THE CONGRESSIONAL INTENT AND DIRECTION OF THE STAGGERS RAIL ACT. THESE TWO ACTIONS FURTHER STAND TO SERIOUSLY AND IRREPARABLY DAMAGE THE FOREMENTIONED BALANCE, ALL TO THE PREFERENCE OF THE RAILROADS AND PREJUDICE TO THE SHIPPER. HENCE, THE NEED FOR ADDITIONAL LEGISLATION. THESE TWO ACTIONS ARE:

-(1)-

MARKET DOMINANCE

NO. 81-4257, ET AL., WESTERN COAL TRAFFIC LEAGUE, ET AL., V. UNITED STATES OF AMERICA AND INTERSTATE COMMERCE COMMISSION

THIS ACTION SEEKS JUDICIAL REVIEW BEFORE THE FIFTH U.S. CIRCUIT COURT OF APPEALS OF THE ICC'S DECISION IN EX PARTE NO. 320 (SUB-NO. 2), MARKET DOMINANCE DETERMINATIONS AND CONSIDERATION OF PRODUCT COMPETITION; AND EX PARTE NO. 320, RAIL MARKET DOMINANCE: REMOVAL OF EXISTING RULE. THESE TWO DECISIONS INVOLVE THE "MARKET DOMINANCE STANDARDS" TO BE EMPLOYED BY THE ICC TO DETERMINE WHETHER IT HAS JURISDICTION TO REVIEW THE MAXIMUM REASONABLENESS OF RAIL TRANSPORTATION RATES.

UNDER PRESENT LAW, A SHIPPER COMPLAINING THAT A RAIL RATE IS UNREASONABLY HIGH, MUST FIRST SHOW THE ICC THAT THE RAIL TRAFFIC IN QUESTION IS SUBJECT TO MARKET DOMINANCE BEFORE ARGUING THE ISSUE OF MAXIMUM REASONABLENESS OF THE RATE. IT IS CLEAR THAT TO PRESERVE CAPTIVE SHIPPER PROTECTION PROVIDED BOTH IN THE RAILROAD REVITILIZATION AND REGULATORY REFORM ACT OF 1976 (4R - ACT) AND THE STAGGERS ACT, IT IS ESSENTIAL THAT THE DEFINITIONS OF RAIL MARKET DOMINANCE BE SIMPLE AND ADEQUATE IN SCOPE.

THE DECISIONS SERVED BY THE ICC SERIOUSLY DILUTE THE ABILITY OF A CAPTIVE SHIPPER TO DEMONSTRATE THAT THE RAIL TRAFFIC IN QUESTION IS SUBJECT TO MARKET DOMINANCE. IF THE ISSUE DECISIONS ARE PERMITTED TO STAND, IT IS DOUBTFUL IF JURISDICTION COULD EVER BE ESTABLISHED. WE WISH TO STRONGLY EMPHASIZE THAT THIS ACTION PERTAINS TO ALL RAIL RATES ON ALL COMMODITIES AND, THEREFORE, IS TREMENDOUS IN SCOPE.

THE REAL QUESTION OF THE STAGGERS ACT, WHETHER COMPETITION IN THE MARKETPLACE PRODUCES REASONABLE RATES SO THAT THE ICC NEED NOT GET INVOLVED, HAS BEEN COMPLETELY IGNORED. IF JURISDICTION CANNOT BE OBTAINED OVER RATES WHICH A SHIPPER CAN DEMONSTRATE ARE CLEARLY IN EXCESS OF ANY TEST OF REASONABLENESS APPLIED IN THE PAST, EITHER THE MARKET DOMINANCE TEST IS WRONG OR THE ICC IS APPLYING THE TEST IN AN ERRONEOUS MANNER. WE BELIEVE CONGRESS SHOULD CLARIFY THE LAW IN THIS REGARD AND TAKE ACTION TO SEE THAT WHERE COMPETITION IS NOT EFFECTIVE TO PRODUCE REASONABLE RATES, SHIPPERS SHOULD BE AFFORDED RECOURSE TO THE ICC.

-(2)-

RAILROAD EXEMPTION - EXPORT COAL

ICC NOTICE OF PROPOSED EXEMPTION
EX PARTE NO. 346 (SUB-NO. 7)
RAILROAD EXEMPTION - EXPORT COAL

THE NORFOLK AND WESTERN RAILWAY COMPANY (N & W) HAS PETITIONED THE ICC TO EXEMPT EXPORT COAL TRAFFIC HANDLED BY RAIL AND MOVING THROUGH

Atlantic and Gulf ports from regulation. N & W contends that this traffic meets the criteria for exemption found in 49 U.S.C. 10505. The petition is supported by the Chessie System Railraods and the Family Lines Rail System.

The ICC issued a notice of proposed exemption served September 3, 1981, and published in the Federal Register on September 4, 1981, (46 FR 44529) seeking comments on the merits of exempting all export coal traffic from some or all regulations. The ICC has just recently established the comment period as 60 days from publication of notice in the Federal Register (published October 21, 1981 at 46 FR 51674). The fact that the ICC did not dismiss the original petition outright, but actually broadened the scope and issued a notice of proposed exemption, which is now under formal consideration, represents serious disregard of Congressional intent and meaning of the National Transportation Policy, the thrust of the Staggers Act, and transportation regulation history in general.

The contention that this traffic meets the criteria for exemption found in 49 U.S.C. 10505 is without merit. This proceeding represents potential harm to our company and industry and will serve as a landmark precedent regarding the ICC's interpretation of the exemption provision of 49 U.S.C. 10505, as applied against rail captive traffic. The possible exemption of any coal traffic would set a dangerous precedent leading to the erosion of the captive shipper protection included in the Staggers Act.

The National Coal Association, Inc. ("NCA") completed a 1979 study of captive coal shipment by rail. That study indicated that:

(a) of all the market types of rail transportation of coal examined (utility, steel, industrial, exports) the export market was shown to have the highest percent captivity to all - 93% captive.

(B) THE NEXT BEST TRANSPORTATION ALTERNATIVE TO RAIL WOULD COST SHIPPERS ALMOST 300% OF THE AVERAGE RAIL COST.

THE TRANSPORTATION OF COAL BY RAIL HAS HISTORICALLY BEEN RECOGNIZED AS A CLASSIC EXAMPLE OF MONOPOLIZATION. THE NEED FOR PROTECTION OF CAPTIVE SHIPPERS FROM RAIL MONOPOLIZATION BY REGULATION HAS ALSO BEEN HISTORICALLY RECOGNIZED -- THAT IS, UNTIL NOW. THE ORIGINAL INTERSTATE COMMERCE ACT OF 1887 WAS ENACTED TO PREVENT THE VERY TYPES OF ABUSES THAT, WE FEEL, WOULD AGAIN BE PREVALENT IF ISSUE TRAFFIC IS EXEMPTED.

ANY CONTENTION THAT ISSUE TRAFFIC MEETS THE CRITERIA PROVIDED AT 49 U.S.C. 10505 IS IN DIRECT CONFLICT WITH THE STAGGERS ACT AND NATIONAL TRANSPORTATION POLICY. ANY BALANCE THAT WE THOUGHT WAS ATTAINED IN THE STAGGERS ACT BETWEEN CAPTIVE SHIPPERS AND RAILROAD ECONOMIC NEEDS WOULD BE COMPLETELY DESTROYED.

- THE RAILROADS WOULD AGAIN BE PLACED IN A POSITION TO EXTRACT MONOPOLY RATES FROM CAPTIVE SHIPPERS.

- SHIPPERS WOULD BE FORCED TO PAY THE PRICE DEMANDED WHILE DEPRIVED OF ANY EFFECTIVE ADMINISTRATIVE OR JUDICIAL RECOURSE.

- SHIPPERS' ABILITY TO NEGOTIATE CONTRACTS WITH RAIL CARRIERS WILL BE SERIOUSLY IMPAIRED AS, WITHOUT REGULATORY CONSTRAINTS, THERE WILL BE NO INCENTIVE FOR THE CARRIERS TO NEGOTIATE CONTRACTS.

- COMMON CARRIER LIABILITY COULD BE SERIOUSLY IMPAIRED OR COMPLETELY ELIMINATED AND SHIPPERS WOULD HAVE NO ASSURANCE THEY COULD GET THEIR PRODUCT TO MARKET, REGARDLESS OF PRICE.

- THE ATTRACTION NECESSARY TO ACHIEVE PRIVATE SECTOR INVESTMENT IN THE AFFECTED INDUSTRIES WOULD BE SERIOUSLY DIMINISHED.

WE EARNESTLY BELIEVE THAT THE CONGRESS DID NOT INTEND THE EXEMPTION PROVISION AT 49 U.S.C. 10505 TO BE INTERPRETED TO APPLIED AS THE ICC IS NOW PROPOSING. THE STAGGERS ACT CLEARLY RECOGNIZES THE NEED FOR CAPTIVE SHIPPER PROTECTION FROM EXCESSIVE RATES. CONGRESS SHOULD CLARIFY THAT INTENT AND PURPOSE FOR THE ICC BEFORE COMPLETE DEREGULATION IS EFFECTED BY ADMINISTRATIVE FIAT.

THE IMPORTANCE OF AVAILABILITY OF ACCURATE COAL RAILROAD COST DATA

THE EMPHASIS PLACED ON COST OF SERVICE DETERMINATIONS WAS EXTREMELY HEIGHTENED BY THE STAGGERS ACT (I.E., JURISDICTIONAL THRESHOLDS, REVENUE ADEQUACY DETERMINATIONS, SURCHARGE APPLICATIONS, AUTOMATIC COST-BASED INCREASES, ETC.). SHIPPER ACCESS TO ACCURATE RAILROAD COST DATA IS NECESSARY TO MAINTAIN THE BALANCE PROVIDED IN STAGGERS ACT BETWEEN CARRIERS AND SHIPPERS.

THE STAGGERS ACT PROVIDED A NEW FRAMEWORK FOR CONTINUING THE DEVELOPMENT OF THE RAILROAD COST DETERMINATION PROCESS. SECTION 302(A) OF THE STAGGERS ACT ESTABLISHED A "RAILROAD ACCOUNTING PRINCIPLES BOARD," AND PROVIDED THAT IT SHOULD BE RESPONSIBLE TO THE LEGISLATIVE BRANCH OF THE FEDERAL GOVERNMENT (29 U.S.C. 11161). AT 49 U.S.C. 11162, IT IS PROVIDED THAT WITHIN TWO YEARS OF THE EFFECTIVE DATE OF THE STAGGERS ACT (OCTOBER 14, 1980), THE BOARD "SHALL ESTABLISH FOR RAIL CARRIERS. . . . PRINCIPLES GOVERNING THE DETERMINATION OF ECONOMICALLY ACCURATE RAILROAD COSTS DIRECTLY AND INDIRECTLY ASSOCIATED WITH PARTICULAR MOVEMENTS OF GOODS . . ."

THE ABOVE-CITED PROVISIONS WERE A PART OF THE COMPROMISE OFFERED TO SHIPPERS IN RETURN FOR THEIR SUPPORT OF THE STAGGERS ACT. IT IS DOUBTFUL THAT THE STAGGERS ACT COULD HAVE BEEN PASSED WITHOUT THESE PROVISIONS. HOWEVER, THEY HAVE NOT YET BEEN IMPLEMENTED. NO ONE HAS BEEN APPOINTED TO THE BOARD. THE BOARD IS NOT FUNCTIONING BECAUSE CONGRESS HAS NOT PROVIDED THE MONEY, ALTHOUGH

APPROPRIATIONS WERE AUTHORIZED BY SECTION 302(A) OF THE STAGGERS ACT.

THE RAILROAD REVITILIZATION AND REGULATORY REFORM ACT OF 1976 (4-R ACT) REQUIRED THE ICC TO DEVELOP A NEW UNIFORM SYSTEM OF ACCOUNTS (USDA) FOR THE RAILROADS, AND IN THE PROCESS IT STARTED WORK ON A NEW UNIFORM RAIL COSTING SYSTEM (URCS) TO REPLACE RAIL FORM A. BOTH USDA AND URCS WERE DEVELOPED BY OUTSIDE "CONTRACTORS," EMPLOYED BY THE ICC, WHO HAVE MAJOR COMMITMENTS TO THE RAIL INDUSTRY. THE EFFECT OF USDA AND URCS SUBSTANTIALLY RAISES THE CARRIERS' VARIABLE COSTS OF HANDLING HEAVY-LOADING, LONG-HAUL, BULK TRAFFIC (I.E., CAPTIVE TRAFFIC).

WE FEEL THAT URCS SHOULD NOT BE IMPLEMENTED UNTIL THE BOARD IS ACTIVATED (WITH SHIPPER REPRESENTATION, AS PROVIDED) AND ALLOWED THE OPPORTUNITY TO THOROUGHLY REVIEW AND DETERMINE THE RELIABILITY AND ACCURACY OF URCS. FURTHER, USDA SHOULD BE SO REVIEWED BY THE BOARD AT THE VERY EARLIEST PRACTICABLE DATE.

COASTAL IS STRONGLY CONVINCED THAT IT IS ESSENTIAL FOR THE PROTECTION OF THE INTERESTS OF CAPTIVE SHIPPERS THAT THE RAILROAD ACCOUNTING PRINCIPLES BOARD BE ESTABLISHED AS A FUNCTIONING ORGANIZATION WITHOUT FURTHER DELAY AND THAT SHIPPERS SHOULD HAVE ADEQUATE REPRESENTATION THEREON.

GOVERNMENT ASSISTANCE FOR DREDGING AND EAST TRACT PERMITTING

THE ONLY LOADPORTS EFFECTIVE IN EXPORTING WESTERN U.S. COAL ARE LOS ANGELES AND LONG BEACH. WHILE THERE ARE A FEW OTHER LOADPORTS PRESENTLY HANDLING EXPORT COAL, AND THERE ARE MANY ANNOUNCEMENTS OF ANTICIPATED LOADPORTS TO BE CONSTRUCTED, THE FACT REMAINS THAT DRAFT LIMITATIONS AND ENVIRONMENTAL RESTRICTIONS CURRENTLY IN EXISTENCE SERVE TO SERIOUSLY DILUTE THEIR PARTICIPATION TO LITTLE, IF ANY, SIGNIFICANCE.

THERE IS A SERIOUS LACK OF COMPETITION BETWEEN AND AMONG RAILROADS AND LOADPORTS IN THE EXPORT OF WESTERN U.S. COAL. THIS LACK OF COMPETITION IS NOT LIMITED TO THE RAILROADS, BUT APPLIES TO THE LOADPORTS AS WELL. AS STATED, WE ONLY HAVE TWO. THEY ARE BOTH SERVED BY THE SAME RAILROADS. THEY STAY RELATIVELY COMPETITIVE WITH EACH OTHER, BUT HAVE NO OTHER FORMS OF COMPETITION. THESE TWO FACILITIES HAVE THE HIGHEST HANDLING CHARGES FOR EXPORT COAL IN THE NATION.

WE FEEL IT IS NOW IMPERATIVE THAT GOVERNMENT MATCH ONGOING PRIVATE SECTOR INITIATIVES BY: (1) DREDGING CHANNELS AND HARBORS TO DEPTHS NECESSARY TO ACCOMMODATE OCEAN COLLIERS THAT ARE 100,000 TO 150,000 DWT IN SIZE, AND (2) ADOPTING A FAST TRACT PERMITTING PROCESS FOR GRANDSIDE, HARBOR AND CHANNEL IMPROVEMENTS AT THE PARTS ALONG WITH AN EXPEDITED ENVIRONMENTAL REVIEW PROCEDURE IN ORDER TO ACHIEVE MODERN COAL OPERATIONS IN A TIMELY MANNER AND THUS PROVIDE MUCH NEEDED VIABLE PORT COMPETITION.

FEDERAL EMINENT DOMAIN FOR INTERSTATE COAL SLURRY PIPELINES IS NEEDED

COAL SLURRY PIPELINES ARE NEEDED TO PROVIDE EFFECTIVE COMPETITION TO RAILROADS FOR THE INTERSTATE TRANSPORTATION OF COAL AND THUS TO PERMIT LESS REGULATION OF RAILROADS. REDUCED REGULATION OF RAILROADS CAN AND SHOULD BE ACCOMPLISHED ONLY WHERE EFFECTIVE COMPETITION FOR THE TRANSPORTATION OF COAL EXISTS. OTHERWISE, THE DOMINANT AND MONOPOLISTIC POSITION OF RAILROADS IN THE TRANSPORTATION OF COAL WOULD LIKELY RESULT IN COMPETITIVE ABUSES WHICH WOULD LEAD TO A LESS EFFICIENT ECONOMY AND TO MORE REGULATION OF RAILROADS.

FEDERAL EMINENT DOMAIN IS REQUIRED IF INTERSTATE COAL SLURRY PIPELINES ARE TO PROVIDE EFFECTIVE COMPETITION TO THE RAILROADS FOR THE TRANSPORTATION OF COAL. FEDERAL EMINENT DOMAIN IS NEEDED

PRIMARILY TO COUNTER RAILROAD OPPOSITION, BUT EQUALLY IMPORTANTLY TO ACQUIRE THE MOST DIRECT AND LEAST COSTLY TRANSPORTATION ROUTES. WITHOUT FEDERAL EMINENT DOMAIN, COAL SLURRY PIPELINES EITHER WILL NOT BE BUILT AT ALL OR WILL BE BUILT ONLY AFTER LONG DELAYS AND ADDITIONAL COST. THE END RESULT WILL BE HIGHER COST AND REDUCED EFFICIENCY THAT RESULTS WHEREVER COMPETITION IS ARTIFICIALLY RESTRAINED, WHETHER BY FEDERAL OR LOCAL IMPEDIMENTS.

WE FEEL THAT FEDERAL EMINENT DOMAIN DOES NOT CONSTITUTE AN UNWARRANTED EXTENSION OF FEDERAL AUTHORITY, BUT IS PERTINENT TO THE FEDERAL GOVERNMENT'S EXERCISE OF ITS CONSTITUTIONAL RESPONSIBILITIES TO PROMOTE INTERSTATE AND FOREIGN COMMERCE. THE EXERCISE OF FEDERAL AUTHORITY WITH RESPECT TO THE PROMOTION OF COMMERCE IS A COMPLETELY PRECEDENTED, LEGITIMATE AND INDEED CONSTITUTIONALLY MANDATED RESPONSIBILITY OF THE FEDERAL GOVERNMENT. THE EVIDENCE WEIGHS CLEARLY IN FAVOR OF GRANTING FEDERAL EMINENT DOMAIN TO INTERSTATE COAL SLURRY PIPELINES. TO DO OTHERWISE IS TO DISCOURAGE COMPETITION IN THE TRANSPORTATION OF COAL AND IGNORE A CONSTITUTIONALLY MANDATED RESPONSIBILITY OF THE FEDERAL GOVERNMENT, ALL TO THE DETRIMENT OF THE PUBLIC WELFARE AND INTEREST.

CONCLUSION

COASTAL RECOMMENDS THAT A SERIES OF CONGRESSIONAL OVERSIGHT HEARINGS BE HELD ON ALL MATTERS OF SIGNIFICANCE DEVELOPED IN THIS HEARING AS EXPEDITIOUSLY AS PRACTICAL.

WE COMMEND THE CONGRESS ON THE RESULTANT LEGISLATION ENACTED BY THE STAGGERS ACT IN THAT A BALANCE WAS ACHIEVED BETWEEN CAPTIVE SHIPPERS AND RAILROAD ECONOMIC NEEDS. COASTAL FEELS THAT THE PROBLEMS DISCUSSED HEREIN COULD BE CURED, AND ALL PARTIES SPARED EXTREMELY TIME-CONSUMING AND EXPENSIVE LITIGATION, IF CONGRESS WOULD CLARIFY THOSE PARTS OF THE STAGGERS ACT WHICH HAVE GIVEN THE MOST TROUBLE. AT THE SAME TIME, THE ICC SHOULD BE CLEARLY TOLD THAT ITS DUTY

IS NOT TO MAKE POLICY ON ITS OWN, BUT TO CARRY OUT THE CONGRESSIONAL POLICY AS EXPRESSED IN THE STAGGERS ACT.

WE FURTHER SUBMIT THAT THE CONGRESS SHOULD IMMEDIATELY LEGISLATE THE RIGHT OF FEDERAL EMINENT DOMAIN FOR INTERSTATE COAL SLURRY PIEPLINES. TO DO OTHERWISE WOULD, WE FEEL, BE TANTAMOUNT TO NEGLECTING CONSTITUTIONALLY-MANDATED RESPONSIBILITIES.

IN CLOSING, I WISH TO STATE THAT WE APPRECIATE THIS OPPORTUNITY TO VOICE OUR CONCERNS REGARDING THE MAJOR PROBLEMS, AS WE SEE THEM, IN EXPORTING WESTERN U.S. COAL.

Senator **WARNER**. I think the testimony is very clear.

Senator **JOHNSTON**. I have a couple of questions.

I'm not up to speed that much on what regulations a city or State can put on the movement of rail traffic through a town. I know there are some powers because obviously you couldn't block the intersection for 22 hours. What powers does the State or city have?

Mr. **RALPH**. I believe the city has the right to pass ordinances that say how long a train can block an intersection. I believe in Houston it's something like 10 minutes or 20 minutes, something of that nature. And I have seen, I believe in Colorado or Wyoming, where a local policeman gave a ticket to the train because it had blocked the intersection for so long.

Senator **JOHNSTON**. The economic benefit of shipping coal is not all that great for the exporting port. I mean my port of New Orleans wants it, obviously, it would benefit them. But most of the benefit comes elsewhere. The Nation as a whole can balance the payments to the coal miners for getting coal and railways and barge operators and others. The actual coal ports, or in my case the port of New Orleans between Baton Rouge and New Orleans would not benefit that much, which means I think that you're going for a head-on collision between the power in the city to restrict the movement of those trains, and the railroads which want to ship their coal.

It seems to me that the environmental movement really ought to take a strong look at that. And don't misunderstand I'm not trying to further restrict railroad movement, and I'd be willing to take more, but there are limits to that. And it seems to me, I believe it was your testimony that said even under a low scenario we would ship 100 million tons of coal by the year 2003, and a high scenario would be about 180 million tons. I think those were the figures which is a dramatic increase. And all of that simply can't be carried by the railroads consistent with crossing at grade.

Mr. **RALPH**. That's right.

Senator **JOHNSTON**. What are the economics of building high-level crossings so you don't have to cross a grade?

Mr. **RALPH**. I used to live in El Paso and when I first got there people used to talk about this great event that had taken place in that town. It was called the depression of the tracks. The word depression had a different meaning to me, but what actually happened was they caused the railroad to lower all of the tracks going through El Paso which is right at the point of the mountain and the river, and by lowering those tracks, they opened up the city and made it a whole different kind of city. It was the most dramatic event that happened in the city of El Paso, because now they could move back and forth freely in their downtown area.

The cost at that time was not substantial. Right now, what is the cost to build an overpass in a city area, you're talking millions of dollars per mile and it would be of that magnitude I'd think.

Senator JOHNSTON. We couldn't depress in Louisiana unless you dredged.

Mr. RALPH. In Louisiana you'd have to go on stilts.

Our construction costs, and I'm sure between Baton Rouge and New Orleans run on the order $2 or $3 million a mile.

Senator JOHNSTON. No, no you can't touch it for that.

Mr. RALPH. It would be the same for railroads.

Senator WARNER. Senator Bradley, do you have any questions?

Senator BRADLEY. I have no questions for this witness.

Senator WARNER. Thank you very much. we appreciate your effort to come up and provide us with helpful information.

Senator WARNER. The next is Mr. Bobzien and Jack McKay.

STATEMENT OF H.J. BOBZIEN, JR., PRESIDENT, AMERICAN COMMERCIAL BARGE LINE CO., JEFFERSONVILLE, IND.

Mr. BOBZIEN. Thank you for the opportunity to be here and give testimony before the subcommittee. As others submitted a formal statement, I would like to have it put in the record and I would just like to highlight that statement right now.

My company, American Commercial Barge Lines Co., is one of the largest barge lines operating in the midcontinental area of our Nation. We operate 64 towboats and over 1,600 barges servicing the basic agricultural and industrial segments of our society. Also, I am the chief executive officer of our affiliated shipyard, Jeffboat, Inc., which is the largest builder of inland river barges in this country.

Presently our industry moves, throughout the internal U.S. waterway system, over 650 million tons of freight annually. Of this total, about 130 million tons, or 21 percent is coal. We do not have any current figures on the amount of export coal which is barged to ports as practically none moved a few years ago, but the numbers are changing rapidly and dramatically as the rest of the world seeks our coal fuel sources.

Today we would like to present to your committee an outline of the basic inland waterway movement of coal, from the producer to the export port. Then we shall enumerate the constraints and problems we perceive at present, as well as in the foreseeable future, which may inhibit our country's ability to fully participate in the world coal Btu economics.

Much of the Eastern U.S. coal reserves lie within 200 miles of the Ohio River. This makes it possible, in many instances, for coal producers to find a competitive way to market their product. They can ship by rail to the traditional east coast railroad seaport terminals, or by truck or rail to Ohio River ports and then via barge to the gulf coast.

The eastern producer, if he has a competitive alternative of truck to barge rather than being a captive to an all rail movement can take advantage of the best efficiencies of competition.

There are no monopolies where highways and waterways are involved. No shipper is captive to any company within these modes of transportation. The coal producer can even operate his own trucks and barges if he deems the service he receives from others is inadequate, or the freight rate for the transportation too high.

Many of the coal producers of Appalachian—eastern—mines are captive shippers to one mode of transportation. They are not able to realize the benefits brought about by water rate competition.

Another problem which now exists for the captive shipper is the dual rate system used by the railroads wherein a higher tariff is charged for the movement of export coal versus the movement to river ports of domestically consumed coal.

An illustration of what we mean by this exploitation is found in the statement of Robert A. Nelson before the Interstate Commerce Commission in March 1981. There, Mr. Nelson writes, and we quote his verified statement:

> An example of the rail carriers' market power to deal with export coal shippers on rates at will and their collusion in doing so is in the instance of N&W and C&O cancellation of a rail rate for a following barge movement on the Ohio River. The two carriers had published such a rate primarily for electric utility consumers along the river. In September 1975, it became apparent that the rail rate might be used for export coal through New Orleans. The two carriers cancelled within three days of each other, the rate's application to export coal, leaving in place for export coal the higher "track delivery rate."

Although the instance just quoted occurred in 1975, we wonder as well at the differences in rates now in use by N&W Railroad which are illustrated below. These sample rates result in differences between $2 and $5.30 a ton which we believe are highly discriminatory against export of coal through Midwest river ports.

Additionally, we find there is no correlation between rail rates charged for movements over the greater distances to east coast ports than those charged for the lesser distances of coal moved to Ohio River ports. In our estimation, the differences of service do not warrant the discrepancies in ton mileage charges.

Presently, however, we river barging companies do work with railroads in many cooperative ventures. At Louisville, Ky., we built a terminal that will handle up to 3 million tons annually. The rail cars can move from a mine to our riverport, be unloaded within 24 hours to a waiting barge and return to the mine siding in record time. The barge then moves to gulf ports and its coal cargo will be transloaded to seagoing vessels for overseas delivery. The advantages are full utilization of rail equipment with the elimination of major delays and the reduction of demurrage costs to the shipper who gets his coal to market efficiently.

Neither equipment availability nor terminal capacity is viewed on restricting factors on world growth at the present time. Our primary problems eminate from the changing relations and the partnership between the Federal Government's role in building and maintaining a navigation system and the commercial river industry's role in providing service to shipper demand.

Many locks located in our rivers are outmoded for present productivity requirements. Congestion in many of the structures is becoming an unconscionable cost factor which the shipper must eventually bear.

Presently there are forces painting realistic pictures of how the Federal Government has subsidized the movement of cargo on the rivers to the detriment of competing entities by building and maintaining a navigation system. However, building and maintaining a navigation system is only one of the many aids received by all the various transportation sectors of our economy.

If the Government is to recover the widely diverse benefits obtained from water development, first we must have an accounting of the beneficiaries of that development. The navigation interests must only be charged for the actual benefits they receive.

At the same time if water project users become required to participate in a cost recovery scheme for Federal aids, so must also the other receivers of the Federal address be required to return the cost of the benefits they have been given in various forms. From the form of land grants to the windfall pension subsidies, the various and sundry tax benefits not available to other investors or concerns including a recent $16 billion plus tax relief accounting changeover package to the railroad companies and only the railroad companies will enjoy it over the next 5 years.

We believe the development, exportation of coal to the world will not only lead to a better balance of trade to the United States, but would also allow for greater stability in the free world.

We are ready to do our part. We believe the mine operators are ready to do their share. And the other transportation modes will deliver as necessary. However, we will wonder what the Federal partnership will do for its part on the passage of necessary legislation which will allow public investment which will return manyfold to the Nation as a whole the cost the Government incurs for fulfilling its traditional role of project development which promotes international trade and commerce.

Thank you, Sir.

Senator WARNER. Thank you. It was very helpful testimony.

[The prepared statement of Mr. Bobzien follows:]

H. J. BOBZIEN, JR.

AMERICAN COMMERCIAL BARGE LINE COMPANY

My name is H. J. Bobzien, Jr. I am President of American Commercial Barge Line Company, one of the larger barge lines operating in the mid-continent area of our nation. We operate 64 towboats and over 1,600 barges servicing the basic agriculture and industrial segments of our society. Also, I am the Chief Executive Officer of our affiliated shipyard, Jeffboat, Incorporated, which is the largest builder of inland river barges in this country.

Presently our industry moves throughout the internal United States waterway system over 650 million tons of freight annually. Of this total, about 130 million tons, or 21 percent is coal. We do not have any current figures on the amount of export coal which is barged to ports as practically none moved a few years ago, but the numbers are changing rapidly and dramatically as the rest of the world seeks our coal fuel sources.

In the inland mid-continent port area that was studied by the Maritime Administration in its Mid-America Ports Study a few years ago, coal transportation represented 30 percent of the total tonnage moved. Coal is predicted to be the great growth commodity of the midwest river systems for at least the next two decades.

Today we would like to present to your committee an outline of the basic inland waterway movement of coal, from the producer to the export port. Then we shall enumerate the constraints and problems we perceive at present, as well as in the foreseeable future, which may inhibit our country's ability to fully participate in world coal BTU economics. Finally, I hope to present some solutions your committee may wish to pursue in its deliberations which we think will help keep our nation competitive and productive in world markets.

Much of the eastern U. S. coal reserves lie within 200 miles of the Ohio River. This makes it possible, in many instances, for coal producers to find a competitive way to market their product. They can ship by rail to the traditional east coast railroad sea port terminals, or by truck or rail to Ohio River ports and then via barge to the Gulf Coast.

The eastern producer, if he has a competitive alternative of truck to barge rather than being a captive to an all rail movement can take advantage of the best efficiencies of competition. Dozens of truck haulers will contend for the initial movement, and at the river port one can choose between a dozen more barge transporters who will compete in price, service, and equipment to get the coal to destination. There are no monopolies where highways and waterways are involved. No shipper is captive to any company within these modes of transportation. The coal producer can even operate his own trucks and barges if he deems the service he receives from others is inadequate, or the freight rate for the transportation too high.

Many of the coal producers of Appalachian (eastern) mines are captive shippers to one mode of transportation. They are not able to realize the benefits brought about by water rate competition. Neither do they have the opportunity to enjoy the efficiencies of unit train rates, but instead must accept single car rates in order to market their product.

The present direction of railroad merger and consolidation, leading to fewer and fewer competing rail entities, may allow for the efficiencies of size in the railroad industry; but without effective competition for traffic within the industry could very well lead to the stagnation of innovation, the resistance of change, and the leverage of monopoly power, which will lead to higher rates rather than competitive ones.

Another problem which now exists for the captive shipper is the dual rate system used by the railroads wherein a higher tariff is charged for the movement of export coal versus the movement to river ports of domestically consumed coal.

An illustration of what we mean by this exploitation is found in the statement of Robert A. Nelson before the Interstate Commerce Commission in March, 1981. There, Mr. Nelson writes, and we quote his verified statement:

> "An example of the rail carriers' market power to deal with export coal shippers on rates at will and their collusion in doing so is the instance of N&W and C&O cancellation of a rail rate for a following barge movement on the Ohio River. The two carriers had published such a rate primarily for electric utility consumers along the river. In September, 1975, it became apparent that the rail rate might be used for export coal through New

> Orleans. The two carriers cancelled within three days of each other - the rate's application to export coal, leaving in place for export coal the higher 'track delivery rate.'"

Although the instance just quoted occurred in 1975, we wonder as well at the differences in rates now in use by N&W Railroad which are illustrated below. These sample rates result in differences between $2.00 to $5.30 a ton which we believe are highly discriminatory against export of coal through midwest river ports.

RAILROAD COAL RATES PER TON

AS QUOTED NOVEMBER 1981

From:	To:	Domestic	Export
Pocohontas,	Kenova - Steam	7.07	9.07 Both
Tug River,	Metallurgical	6.53	
Upper Buchanan,			
Clinch Valley #1	Ironton - Steam	9.07	13.35 Both
or Tiller	Metallurgical	8.37	
	Hanging Rock - Steam	8.21	13.35 Both
	- Metallurgical	7.66	
	Wheelersburg - Steam	8.05	13.35 Both
	- Metallurgical	7.66	

Two points about this table must be made: First, all origins are on rail lines while the destinations listed are all river ports, and the final movement of the export coal is by barge to a Gulf Coastal terminal. Second, and relevant to our work today on export constraints, must be the question, why are export coal rail rates to river ports so much higher than domestic rates?

Additionally, we find there is no correlation between rail rates charged for movements over the greater distances to east coast ports than those charged for the lesser distances of coal moved to Ohio River ports. In our estimation, the differences of service do not warrant the discrepancies in ton mileage charges.

Presently, however, we river barging companies do work with railroads in many cooperative ventures. At Louisville, Kentucky we built a terminal that will handle up to 3 million tons annually. The rail cars can move from a mine to our riverport, be unloaded within 24 hours to a waiting barge and return to the mine siding in record time. The barge then moves to Gulf ports and its coal cargo will be transloaded to seagoing vessels for overseas delivery. The advantages are full utilization of rail equipment with the elimination of major delays and the reduction of demurrage costs to the shipper who gets his coal to market efficiently.

At Ohio River ports, as well as those on the Mississippi River, a new spirit of coordination between railroaders and barging companies, including fair transportation pricing policies, will have to occur in order to hold down the costs of coal movements to the export trade.

There are vast coal deposits in the Illinois Basin comprising the states of Indiana, eastern Kentucky and Illinois. This coal, even though considered high in sulphur content, will be part of the wave of future exports being moved by barges. Illinois basin coal is about 2.5 percent sulphur, but it can be blended here or in European ports with the one-half percent sulphur coal to meet the present required standards in Europe.

By the year 2000, the steam coal export estimates issued by the I.C.E. Task Force will be 197 million tons, or 12 times more than the 16 million tons exported in 1980. We can also expect large increases in the export of grains needed to feed the world. All modes of transport will be required.

In 1978, the latest Corps of Engineers statistical figures on tonnages moved on the inland waterways, shows that the barge traffic density on the Mississippi River north of Baton Rouge was 135 million tons. Barge traffic has been estimated to increase an additional 75 million tons on the Lower Mississippi by the year 2000. Most of the increment will be export grain and coal. Therefore, we should see a total of 210 million plus tons on this river at the turn of the century.

Railroads have claimed they are able to handle the traffic presently moving on the Inland Waterways; however, we disagree. Consider the social implication if this amount of traffic was shifted to river valley railroad trains. The average tons per train is 2,174 tons. The average number of freight cars per train is about 68.4 cars. The average speed of freight trains between terminals is is around 20 miles per hour. The speed, of course, would be about half this rate through cities and towns.

Since an average train, from locomotive to caboose is about 3,500 feet long, by allowing for approach and clearance at each grade crossing, it is estimated it would take about 5 minutes for a train to pass a given grade crossing within a community. The estimated year 2000 barge tonnage arriving in the New Orleans/Baton Rouge area, if transferred to rail, would mean an additional 170 railroad trains per day with a crossing tie up of 22 hours per day more than the present tie ups which they impose on a community. With present traffic loads, it could mean more hours than there are in a day. Just imagine the social, health, and safety implications of a city continually cut in half with ambulances and firefighting equipment trying to reach an emergency in time, let along the impact of local delivery of products, or people going to, or returning from work.

Modal competition aside, we can and must participate in the world coal market to the greatest extent we can to be competitively viable. All forecasts show that the market will be there. As you know, our ability to partipate is one of price. One of the greatest detriments to our pricing policies appears to be changing political climate. Where the federal government has always had a posture to improve ports and trading opportunities oversea from the earliest days of our founding, we now are faced with the prospect of adding a multitude of straws to the proverbial camel's back. The United States is the high cost producer of coal having added to its price the requirement for environmental and safety purposes, by requiring lengthy permit processes to mine, dredge, and build facilities, by having inadequate deep modern ports, by allowing court cases for NEPA and other causes of action to tie up the whole process, and now the federal government seems to be seeking to add more costs to export coal by adding additional taxes or fees to our water transportation network.

The ability to fully take advantage of the export coal opportunities now coming into play will depend upon positive Congressional action on many fronts that will provide for stable program conditions allowing long term capital improvement decisions to be made. The coal export forecasting bible upon which all updates are based is, of course, "Coal-Bridge To the Future." We know the future must be bridged, but we do not want to be stuck with a bridge which leads nowhere. Congress, by easing burdens, or creating new ones, will determine the path of our decisions. However, at present it is impossible to make proper judgments of risk capital due to the enormous amounts needed for each increment of productivity change without knowing in which direction we are being led.

As an example, we built in 1975 a transloading facility at St. Louis with the capability of handling 10 million tons of low sulphur coal from the Powder River Basin. At that time governmental emission standards allowed use of this low sulphur coal without scrubbing equipment in utility plants. What happened? The government in its attempt to mandate specifics, rather than allow performance standards to achieve the same results, changed the law and required plants to add scrubbers, regardless of the level of sulphur dioxide emissions. Power plants, being required to add the controls decided they would not commit to western coal since they had to install scrubbers anyway. So now we have an efficient modern terminal with tremendous excess capacity and no customers in sight because of a changing governmental decision. The reluctance of the private market to invest millions in equipment, to enter into contracts for coal supplies, to reserve dumping and storage space at ports, is easily understood when we consider that industry hasn't the foggiest idea of what the pronouncements from Capitol Hill will be on energy policy, clean air, port development, inland waterway user charges, or a variety of other issues which affects the very health of our industry and nation.

We don't mind taking economic risks based on our expertise, judgment, and ability, but to venture capital into the arena of political decision making is like playing cards with a dealer who makes up the rules as you play along. When political direction changes radically, it tends to put one in the role of reactor rather than innovator. If stable, rational government policies are carried out, we can and will innovate as we have in the past. Competitive factors will demand it. The inland barging companies have the ability to meet any reasonable demands placed upon them.

Another example of political disruption was the imposition of the grain embarge. Our farmers lost market share in the international grain trade to foreign suppliers who filled the void. It may be years, if ever, before our farmers recapture those markets. This led to an over supply of transportation equipment in the barge line industry.

Presently, the inland river and canal barge fleet consists of about 18,000 dry cargo hopper barges with a tonnage capacity of approximately 27 million tons. The construction capabilities of inland shipyards which can produce 2000 plus barges annually would allow our industry to grow at a rate of 10 to 15 percent per year if the business is available. We believe this capacity is more than adequate to meet any future demand on waterborne commerce.

Neither equipment availability nor terminal capacity is viewed as restricting factors on water commerce growth at the present time. Our primary problems emanate from the changing relations in the partnership between the federal government's role in building and maintaining a navigation system and the commercial river industry's role in providing a service to a shipper demand. Many locks located in our rivers are outmoded for present productivity requirements. Congestion at many of the structures is becoming an unconscionable cost factor which the shipper must eventually bear.

The best estimates by the Corps of Engineers indicate that on an average, replacement of a river lock and dam takes a generation, or about 25 years, from the initial study request to final opening of the structure for traffic; and that sluggish pace cannot be effective in a lean and hungry world market. For example, at Gallipolis Lock, on the Ohio River, our company experienced an average of 5.5 hours delay per tow before beginning the lock cycle, during 1980. The lock chamber itself is only 600 feet long, and requires the standard Ohio River tow of 15 barges to be locked through in two stages, thereby increasing the total time lost at the lock to about 7.5 hours. Kentucky dam on the Tennessee experienced similar delays before beginning the lock cycle, and in 1980, Lock and Dam 26 on the Mississippi suffered delays of 19.5 hours per tow.

Presently there are forces that have painted surrealistic pictures of how the federal government has subsidized the movement of cargo on the rivers to the detriment of competing entities by building and maintaining a navigation system. We admit that water resource projects do aid vessel operators when they compete for business as well as providing benefits to others. However, building and maintaining a navigation system is only one of the many aids received by all the various transportation sectors of of our economy. If the government is to recover the widely dispersed benefits accruing from water development, first we must have an accounting of the beneficiaries of that development. Then navigation interests must only be charged for the actual benefits they receive.

At the same time, water project users become required to participate in a cost recovery scheme for federal aids, so must also the other receivers of the federal largess be required to return the cost of the benefits they have been given in various forms, from the "forever subsidy" given in the form of land grants, to the "windfall" pension subsidies given to support what is equal to our private pensions over and above social security, to the various and sundry tax benefits not available to other industrial concerns, including the recent $16 billion plus tax relief betterment accounting change-over package that the railroad companies, and only railroad companies, will enjoy over the next five years.

Further, the channel access from the Gulf through New Orleans to Baton Rouge must be deepened to permit the full loading of 150,000 DWT bulkers with coal to reach overseas markets.

Dredging of river channels and deepwater coastal export facilities has risen dramatically in cost in the past few years due primarily to higher, more stringent environmental protection demands. We do not advocate that these environmental protection standards should be abandoned; but we do believe the costs for those operations should be properly allocated. Improvement of the channels of the eastern United States coastal ports may require serious investments for environmental protection; and if those environmental costs are in the interest of the nation, then the nation should pay for them: certainly not the individual private transporters.

Dredging of river or port channels is not a matter open to control by the vessel operator's decision; river and port channel maintenance must be done by federal action, because these waterways belong only to the federal government, and the government has reserved the right to decide when and where and how these improvements are to be made.

Who benefits from a deep water port at the lower end of the Mississippi? The Illinois, Indiana, Kentucky, Ohio, West Virginia, and Pennsylvania coal miners, as well as all who serve his needs and all those citizens who are helped by improved strength of the U. S. dollar.

The National Coal Association estimates that total coal exports of almost 90 million tons in 1980 created 32,700 coal mining jobs and an additional 30,000 jobs in support industries. This means for every barge of 1,500 tons which we load, another person is employed and not on the unemployment roles.

This export coal tonnage was valued at $4.5 billion which assists at getting our country to a favorable balance of trade. The Commerce Department predicts conservatively that coal exports will add more than $6 billion in trade income by 1985, and over $14 billion by the year 2000 in today's dollars. Can we afford not to export coal?

The present overseas structure for coal imports has slowed down somewhat with a resulting stretchout of their capital programs. This is due to a number of factors, including the world oil glut which has slowed overseas plant conversions, a surplus of Scandinavian hydro power last spring and summer, the price of coal from this country, an excess of stockpiled coal in Europe which was contracted for speculatively.

during the U. S. miners strike, the Russian gas project, the national subsidization of coal mined in Europe, and the availability or unavailability of capital at reasonable interest rates.

We believe the development and exportation of coal to the world will not only lead to a better balance of trade for the United States, but would also allow for greater stability in the free world. Presently, we are called the "bread basket" of the world, yearly exporting millions of tons of grain to hungry nations around the globe. We will soon also be called the "coal bucket" of the world as nations will need our black gold power reserves to keep industrial plants running.

The rest of the world will not want to see a disruption or destruction of the stability which makes us the major contributor of world food supplies and producers of stable energy sources at reasonable prices.

Over the last several years, we have seen study after study report on the coal export and transportation related problems. We have studied the estimates of tonnages needed to be moved. We have listened to speeches and read articles in papers and magazines about the coming of the coal age. The rhetoric has been sounded for years. We're ready to do our part, we believe the mine operators are ready to do their share and the other transportation modes will deliver as necessary; however, we wonder what the federal partnership will do for its part in the passage of necessary legislation which will allow public investment in worthy public projects which will return many fold to the nation as a whole the costs the government incurs in fulfilling its traditional role of project development which promotes international trade and commerce.

The Chairman, Senator Warner, just over a year ago, said about America's performance in constructing deep draft ports:

> "Not one shovel of dredge material has been lifted in America's coal ports--despite the urgent, desperate need for such deepening activity to commence as quickly as possible."

These words are true this December as well as last, and we only hope next December will see the shovel lifting, deepening, and maintaining efficient ports on our internal and coastal waterways.

STATEMENT OF JOHN F. McKAY, VICE PRESIDENT, BULK TRANSPORTATION, McALLISTER BROTHERS, INC., NEW YORK, N.Y.

Mr. McKAY. Senator Warner, members of the Senate Subcommittee on Energy, my name is John F. McKay and I am vice president of transportation of McAllister Brothers, Inc., a family-owned, full-service towing and transportation company that was founded in New York 118 years ago by Captain James McAllister, an immigrant from Northern Ireland.

Currently, we operate 70 tugboats on all the major east coast ports, in Panama, the Netherlands, and in Saudi Arabia, in addition to maintaining a cost towing service and a salvage operation.

It is indeed a pleasure and an honor to appear before your subcommittee today in the interest of coal, our greatest energy resource.

Our company is interested in several facets of the coal business. As ship dockers in all major east coast ports we are quite naturally interested in the increased ship traffic that deepened harbors would provide for the coal colliers of the future. Conceptually, therefore we favor a program to dredge our harbors to the depth required to accommodate the deep draft ships.

However in a dissertation on the necessity to dredge our coastal and gulf coast ports to 55 or 60 feet we have mixed emotions about the urgency of such huge costly projects.

Our concerns center around the following critical points: (a) The unwillingness of foreign buyers principally European, to commit to long-term coal purchase contracts, (b) the sparcity of foreign ports capable of receiving 55-feet-deep colliers or more, and (c) the huge panamax tonnage available to move 40 to 80,000 ton cargoes at existing drafts.

I'd like to disgress just a minute and mention in the oil crisis that occurred back when the Suez Canal was blown up at the Yom Kippur War, there was a rush to build VLCC tankers all over the world. And those of us who were in the shipping business and had foreign contacts can tell you that the Norwegeians are just loaded with anchor ships and many of them are scheduled for the ship rakers at what would be scandalously low prices.

We have a great fear of crating that situation again.

Commenting on the above points in their order, we have witnessed in recent months a substantial decline in the quay line at Hampton Roads from 168 ships—prestrike number—to 50 ships last week. Part of this can be attributed to better scheduling on the part of the serving railroads in the matter of car staging, coal blending operations and dumping rates. But not all of the decline in the line can be attributed to this new efficiency. During the miners 77-day strike foreign buyers sought their supplies elsewhere, namely South Africa, Australia, and even Poland, in its political dilemma, seemed to be able to supply a portion of western European demand to the extent that our agents in foreign ports are reporting stockpiles of coal.

Therefore it is reasonable to conclude that the foreign buyers will not put all their eggs in one basket. On the positive side, U.S. east coast ports are closer to Europe than South Africa and Australian ports whose ability to export continuously is clouded by local political problems and heavy union activity punctuated by unplanned and lengthy interruptions in reliable, rateable deliveries of steam coal.

Addressing point B of this section, we note that only a few northern European ports can accommodate the 100,000- to 150,000-ton collier—Antwerp, Rotterdam, Amsterdam—the ARA ports. The absence in the 1980's of foreign ports capable of receiving the super collier—point C—will cause the use of 40,000 to 80,000 deadweight tons bulk carriers to predominate in steam coal trade well into the 1990's.

These considerations are therefore paramount in our thinking in tempering the rush to deepen all our export coal harbors to handle colliers of 55 to 60 feet. Eventually with the immense expansion by the coal companies and railroads of export coal loading facilities we see the Baltimore, Hampton Roads, Norfolk, areas as dominant in the export trade. Coal from West Virginia, Pennsylvania, and eastern Kentucky will most likely be exported by the traditional east coast export ports.

In the interim period which could be an extensive period of time governed by world economic conditions and tempering of crude oil prices by OPEC countries, there are coming on stream intermediate size coal loading facilities which admittedly are limited by draft of the originating rivers but can nevertheless service the small ships calling on shallow draft northern European and Mediterranean ports in addition to ships going to Korea with eastern Pennsylvania anthracite.

The Hudson River, a deep-draft river with a controlling depth of 31 feet running south from northern New York to New York City has several locations capable of loading 30,000-ton ships. At Ravena, N.Y., 20 miles south of Albany, Atlantic Cement Co. has already loaded six vessels aggregating over 200,000 tons of coal destined for Europe. A new limited-draft coal terminal is planned for Rensselaer by a Dallas-based firm called New Amsterdam Coal Co. At East Kingston, N.Y., also on the Hudson, 99 miles above the city a new 5-million-ton-per-year coal terminal is planned to be operational in 1983.

In the city of New York itself at Stapleton, Staten Island, the department of ports and terminals has proposed a deepwater loading site fed by a limited length slurry pipeline across Staten Island from the Arlington yards of the B&O Railroad on Kill Van Kule to the superb deepwater anchorages at Stapleton.

It is interesting to note that amidst all the flurry about deepwater ports New York already has a 45-foot channel and in the naval anchorages in the lower Hudson River there is 55 feet at mean low water. The controlling factor is Ambrose Channel which is 45 feet.

The upper Hudson operations limited to 31 feet can therefore be increased to the maximum by downriver, midstream transfer operations from barge to ship as now occurs in the Port of New Orleans and to some degree at Baltimore also.

Admittedly, these small terminals with their ancillary operations, albeit economically put together will ultimately be phased out by the high-volume, direct rail-to-ship transfer at Baltimore and the Hampton Roads areas. Our best estimate would be a lifespan of about 5 years for these marginal operations.

In the case of the Port of New York the limiting factor is the absence of a strong reliable rail service originating coal from low sulfur, low ash mining areas, but these seemingly temporary facilities offer the coal exporters the ability to ship coal without the tremendous expenditures attendant to dredging all major U.S. coal ports to the super depths required to handle the 150,000-ton colliers. Paramount in the current planning and scheduling of coal bulk carriers is the reduction and even the elimination of costly demurrage charges that run about $15,000 per day per ship. Weighing this cost when the smaller coal terminals offer a captive loading site to European buyers even in smaller ship.

Currently, there are several plans for two-stage loading facilities where river and harbor drafts limit the total loading procedure.

In the Delaware River, I believe National Bulk Carriers is planning a barge-to-ship loading system employing a large 100,000-ton collier supplied by 30,000-ton barges. This site is at Big Stone anchorage at the mouth of the Delaware where the ocean vessel would moor alongside an anchored vessel supplied by coal loaded in the Philadelphia or upper Delaware area. To my knowledge the draft at Big Stone is ample to serve colliers of the 55-foot draft design.

As I mentioned previously, the vessels loaded in the upper Hudson to the 31-foot draft can be topped off in the lower harbor to drafts up to 45 feet, currently existing.

What I have related to you up to this point in the report pertains to exportation of steam coal to foreign countries. There is another aspect to the transportation of coal that will impact domestic towing and barging operations. I am referring, of course, to the domestic utility industry many of whose generating stations appear on the Department of Energy mandate list for conversion from imported bunker "C" [No. 6 oil] to coal.

As we well know there has been some foot dragging in the implementation of this order for various reasons, mostly environmental, some because of the impossibility of conversion without attendant prohibitive costs but none due to location on streams that could not be serviced on a continuous basis with barging equipment.

Currently, New England Electric Co. at Brayton Point, Mass., has converted at least two of its units to coal burning with the plan to continue for conversion of its remaining units. This plant is now serviced by a 34,000-ton tug/barge unit loading out of the Norfolk area proceeding over an ocean route to Narragansett Bay and then to the dock at Brayton Point. This unit does not require depths beyond that which currently exist nor do I envision any coastal harbor generator stations requiring major dredging to support their conversion plans to coal from oil.

From an equipment viewpoint there are several aspects to be considered in the transportation of steam coal for domestic use along the eastern seaboard. The size of the barge and its route from loading point to discharge point will determine its construction. For example, a coal movement from the Norfolk area to New England requiring volumes of 25,000 to 35,000 tons per loading will require an ocean service barge complete with enclosed cargo holds, while a movement from the Chessie at Newport News to Baltimore Gas and Electric's new facility at Brandon Shores, Baltimore, would require a barge whose technical classification would be for lakes, bays, and sounds.

It is somewhat ironic that I should be expounding on this aspect of the coal transport picture. I'd like to digress a moment. The gentleman to my right was my boss when what I am about to relate to you took place. Back in 1974 when the oil crisis was thrust upon us without warning I was executive vice president of Jeffboat, the largest inland shipyard in the United States located on the Ohio River at Jeffersonville, Ind. Coming originally from a New York Harbor-east coast towing background, I could see the eventual conversion of all the powerhouses back to coal and serviced by barging operations just as my forebears had done for 50 years before.

There were several problems, though, aside from the environmental that appeared to be stumbling blocks. To begin with, the railroad structure that fed the 11 coal loading facilities in the greater Port of New York area had been systematically dismantled. The powerplants no longer had the required upland storage to handle an inventory of several hundred thousand tons of coal and most of all, from a barging point of view, the vast fleet of harbor coal barges and been scrapped or disposed of for other functions.

What was the answer?

Well, from a shipyard point of view, the hat I was wearing at that time, we set about to design a series of barges of various sizes to be presented to the transportation companies that were likely to rekindle the old flame so to speak. We were understandably excited by the prospects for this business but as time wore on the "bloom seemed to be off the rose" and lethargy was again setting in despite the ever-mounting pressures of increased prices and dwindling domestic production. I suppose, in a sense, that is the American way. We are a crisis-oriented nation and we do not register concern or action until "Attila is at the gates of Rome."

The barges we designed and which are still being promoted meet all the known and existing power station draft requirements on the eastern seaboard and have been proposed to a number of utility companies requesting proposals for transportations.

Therefore, with respect to the deepening of harbors to support domestic carriage of coal we see no great sense of demand but there is an aspect to dredging that has been, these past 10 or so years, sadly neglected. I'm referring of course to the maintenance dredging of existing channels and pier side berths that have been virtually prohibited or impeded by overconcern for the environment without due consideration given to the normal flow of commerce. There are areas of harbors that are virtually unusable because of this decline in the periodic maintenance dredging program. This is critical to domestic commerce.

In summary, our positions are as follows:

First, we support the need and the plans for dredging harbors to depths required to accommodate the large, deep-draft colliers but not every harbor that wants to get into the coal act.

It is our opinion that the traditional coal-handling ports supported by the major coal-hauling railroads will ultimately garner the majority of overseas steam coal sales. Economic and geographical selectivity should be the basis for implementing a dredging plan because of the tremendous costs involved.

Second, the current drafts for coastwise traffic are adequate for 25,000- to 35,000-ton barges.

Third, midstream transfer from barge to ship at deepwater sites can be reasonably inexpensive alternatives for an interm period while the huge coal-loading facilities are under construction at the major coal ports.

Fourth, we urge the reinstitution on large scale of maintenance dredging for harbors that have been greatly impeded by the silting-in process of swift moving rivers carrying alluvial deposits.

Fifth, the intermediate size barge planned for short coastwise and harbor deliveries are well within the tolerances of harbor drafts.

Senator Warner, and members of this Subcommittee on Energy, I want to thank you for allowing me to state our position and thoughts on this phase of our business. We are bullish on coal and fully expect to participate in its rivival and growth as the source of American's energy at least for the balance of this century.

Thank you.

Senator WARNER. Thank you, Mr. McKay.

Senator BRADLEY. I was interested in your assessment of the New York Harbor and of the potential for very deep draft coal ports generally in the country. You didn't mention New York Harbor as a possible deep draft coal port. I was curious, why didn't you?

Mr. MCKAY. I'm probably a maverick in that sense, Senator, being a New Yorker, I suppose I could be held for treason. But I'm a practical businessman and I also have been in this transportation, barge, and boating business all my life as has my family. I'm well aware of the necessity for intermodality of transportation. Without a strong railroad system the exportation of coal is almost impossible on the east coast. I say this unselfishly, that the Ports of Baltimore and Norfolk and that area look to be the centers of exporting the coal.

We in the Northeast as you well know have been plagued by a poor railroad system with the collapse of the Penn Central.

With the merger of all the other coal-hauling roads of that era, the Lehigh Valley, the L&W and the Erie, the D&H, we were left with one coal-loading facility which is not even an ocean-loading plant. It is a barge-loading plant and it has limited capability. It exists in Port Reading. It is the site of the old Philadelphia & Reading Railroad. That to my mind is not a major coal-loading facility. That is a local barge-loading facility.

Senator BRADLEY. So your answer is the reason you had not considered the Port of New York as a possibility was Conrail.

Mr. MCKAY. That's correct.

Senator BRADLEY. As you compare the relative dredging costs of other ports you don't think that those relative dredging costs offset the uncertainty that a Conrail operation might create?

Mr. MCKAY. Well——

Senator BRADLEY. Well the differences you are aware, you have pure white sand in the Ambrose Channel and to get from 45 to 60 feet is much easier and much less cost than virtually any other port in the country. If that could be done at a very cheap cost and it can, the question then is why doesn't it have the potential of being a major coal facility. Your answer is that even the difference in cost wouldn't overcome the problem of Conrail.

Mr. McKay. That is my personal opinion.

Now there is another facility that I mentioned that the city of New York, the Stapleton, the slurry pipeline, I have attended several meetings on that. I don't agree with the concept.

Senator Bradley. At the same time you said this about the Port of New York, you seemed to have been rather optimistic about the Delaware Bay. The facility which would load a 150,000-ton ship in stages off of the mouth of the Delaware Bay. How do you think the coal will get from the mines to the mouth of the Delaware Bay?

Mr. McKay. United States Steel has a site in Morrisville.

Senator Bradley. But that's not a draft of more than 30 feet.

Mr. McKay. It's 33, 34 feet. The plan is by several transporters to load barges at those sites, 30,000-ton barges, and then take them down to the mouth of the Delaware and discharge them into deepwater docks.

Senator Bradley. Which you have assumed is via barge transportation and not rail transportation.

Mr. McKay. That is correct. Also you have the new Conrail facility at the Grenwhich Pier 124, that unless you dredge the whole Delaware which is quite a length, you're not going to be able to get beyond Hog Island Shoal with deep-draft ships, so that too will have to be served by barges down to the anchorage.

Senator Bradley. Thank you.

Senator Johnston. Mr. McKay, you are familiar with the figures on the cost of U.S. coal as opposed to South African and Australian. Just to give you those, the cost in 1980 of steam coal in Europe from South Africa was $1.95 per million Btu's. From Australia it was $2.20 per million. And from the United States it was $2.35. Similarly to the Pacific rim markets it was $1.60 from South Africa, $1.95, excuse me, $1.95 from South Africa, $1.60 from Australia, and $2.25 from the United States and Canada.

Now the savings from using deep-draft colliers, depending on the length of the trip is between $2.40 and $5 a ton.

You would agree with those figures?

Mr. McKay. Yes.

Senator Johnston. The difference in that cost is the difference in the competitive cost of shipping from these South African and Australian——

Mr. McKay. Yes.

Senator Johnston. That being so, the reluctance of the United States in making a commitment on deep-draft harbors is a pretty good explanation for the reluctance of European and Pacific rim countries from committing long-term contracts just yet, isn't it?

Mr. McKay. It seems to me it's the chicken and egg routine, which is going to come first? Are they going to commit or are we going to build? If we build, as the gentleman from Wyoming testified before the coal miner, we're shooting crap. I don't quite agree with his whole analogy, but I would like to see a little bit more of the earnest money by these European countries in the purchase of American coal.

Senator **Johnston**. I can tell you from personal experience, having talked to the French, West Germans, Austrians, the Finns, and people from the Netherlands, that they are anxious to make long-term contracts, those to whom I personally talked. But we've had these tremendous economic differences. That is, you have to pay more for the U.S. coal without deep draft. You have to pay less, or you get it for less when you do have deep draft. The question becomes one of yes, we want a contract, but you need the deep-draft harbors. I hope you take a look at that because I think it's——

Mr. **McKay**. I'm not against, as I have said. My company is not against, or the industry is not against deep-draft dredging. But what we're saying is, it should be selective. I can tell you it may offend some people, but I can tell you the ports we think should be dredged.

New Orleans, Baltimore, Norfolk, New York——

Senator **Bradley**. I think you can't go wrong with those three or four.

Senator **Johnston**. I certainly agree with you. I would also agree with you when you say that not all coal ports should be dredged. I think that's a question of economics. If the economics support it as I think they do in those three ports and perhaps others, then you ought to go ahead. Particularly, you look at New Orleans, the cost-benefit ratio is more than positive in New Orleans, even without consideration of ports.

We save $1 billion a year there on grain shipping costs with deep draft.

Now you're familiar, I'm sure, with this interim report of the Interagency Coal Export Task Force. They say the number of deep-draft colliers will increase from 7 percent in 1980 to 58 percent by the year 2000. That is to say 1980, 93 percent, were less than 100,000 deadweight tons. In the year 2000 it will be 42 percent less than 100,000 deadweight tons, 58 percent more than 100,000 deadweight tons.

I don't know if you can count on the Department of Energy or not, but if they're correct or close to it, it would tend to indicate that there will be colliers. They will be moving in world trade. It seems to me the central point here is that the economics are so clear, $2.40 to $5 per ton savings, that those who have the ability, those countries that have the ability to ship the coal in the deep-draft colliers are going to be the ones that are going to get the business. It is not inevitable that the United States, in spite of our great coal reserve, is going to be the country that is going to do the coal shipping.

I think it is very much like the automobile industry. We used to think it was inevitable that GM, Ford, and Chrysler were going to dominate the world automobile markets regardless of what we did. We found that to our great sadness that was not true. I think the same thing is true of coal. That is to say if we don't dredge those harbors then those countries are going to make some long-term contracts with countries that have the ability to give them the savings of $2.40 to $5 per ton.

So I hope we will soon get about the business of dredging New York and whatever harbors.

Mr. McKAY. In line of what you said about the number of vessels, the Dravo Corp. put out a very interesting report and they list a number of vessels in various tonnage categories and it is their information that I used to compile some of my statistics.

For instance, in the zero to 50,000 deadweight ton capacity, there are 3,622 vessels in the world aggregating 64 million deadweight tons in that category. From the 50,000 to 100,000 deadweight there are 614 vessels existing, agregating 34 million deadweight tons. Over 100,000 deadweight there are 331 vessels aggregating 37 million deadweight tons. It would seem to me that the Department of Energy is correct in saying as time goes on the vessels that would be built would be of a bigger variety, but with the existing tonnage that we're looking at here today, we cannot overlook the fact that it's here. It's, well it's almost 4,200 vessels that are in the capacity of 50 to 100,000 deadweight tons.

Senator JOHNSTON. I think we're saying the same thing and that is that right now 7 percent of the ships are the big vessels but by the year 2000 that mix will change and change rather dramatically.

One last question. What is your attitude toward coal slurry pipelines?

Mr. McKAY. I'm against them.

Senator JOHNSON. That is because of what?

Mr. McKAY. For several reasons. I don't know where the continuous flow of water is going to come from to support the movement of coal by water. We are witness to severe droughts throughout our country in the last couple of years, even in the Northeast. Senator Bradley's home State——

Senator JOHNSON. Coal pipelines would also be in competition with your barges?

Mr. McKAY. I don't think they'd be in competition with my barges as much as they'd be in competition with Mr. Bobzien's barges. But I also know that when you water coal you reduce the Btu capacity of it. There is, as mentioned before, this problem of hot ships. I don't know how you completely dry out coal to ship it. You're going to be carrying, I've seen numbers as much as 10 percent moisture in these vessels with the coal slurry. So the customer in a sense is getting a little shortchanged there.

There are a number of technological problems beyond the legal problems that I don't think are solveable. This New York slurry pipeline is very short. But yet when you talk to Commissioner Seal of the city of New York concerning, it seems to be completely overlooked, the interchange of the railroads originating and delivering the coal, and the revenue sharing. She readily admits that it seems to be an insurmountable problem. It originates on Conrail, it will be terminated on the B&O.

To my knowledge, being associated with the water transportation industry over these years, there doesn't seem to be any type of cooperation on the railroads themselves in revenue share and I don't think the B&O Railroad is going to rebuild their bridge over Kale Vonkuhl to support union trains to deliver Conrail coal. So I don't see that the slurry pipeline, as small as it is, as short as it is, from one side of Staten Island to the other, as being a viable project.

That would be the only possible competition that we would envision from the coal slurry pipeline.

Senator WARNER. We now have our last panel. We have two witnesses. We first have Mr. Winston Holbrook, vice president of A. T. Massey Coal Co. representing also the National Coal Association, Coal Exporters Association, and we have Mr. Robert Corder, rail division administrator, Virginia Department of Highways and Transportation.

Thank you gentlemen for your courtesies to the members of this committee, and your willingness to be patient.

STATEMENT OF WYNSTON D. HOLBROOK, VICE PRESIDENT, SALES, A. T. MASSEY COAL CO., INC., RICHMOND, VA., ON BEHALF OF THE NATIONAL COAL ASSOCIATION AND THE COAL EXPORTERS ASSOCIATION

Mr. HOLBROOK. Mr. Chairman, my name is Wynston D. Holbrook. I am vice president of A. T. Massey Coal Co. Our corporate office is located in Richmond, Va. I am appearing on behalf of National Coal Association and the Coal Exporters Association. My company is a member of NCA and CEA. A. T. Massey Coal Co. president, E. Morgan Massey, is the chairman of the NCA Transportation Committee. He is out of the country and cannot be here today.

Inland transportation of coal is an important subject for my company, for coal producers and other organizations associated with the coal industry represented by NCA, and for companies engaged in exporting U.S. coals represented by CEA. A. T. Massey Coal Co. has been engaged in coal production and sales for 65 years. We have operations in West Virginia, Kentucky, Tennessee, Pennsylvania, and Colorado. This year we will produce 15 million tons and purchase an additional 8 million tons of coal. Of this total of 23 million tons, 14 million tons will be marketed domestically and 9 million tons, nearly 40 percent of the total, will be exported.

Clearly then, we fully support the position of NCA and CEA that efficient inland transportation, reasonably priced, is a key element in assuring that U.S. coals, today and in future years, will be competitive among worldwide sources for coal and will realize their full share of the world market for metallurgical and steam coals. Inland transportation of coal to coastal ports such as the new coal port terminals my company is building at Newport News, Va., and at Charleston, S.C., must be reasonable in price, adequate in level of service, and dependable if we are to fully meet our outstanding capability in the United States to serve varied coal markets in Europe, the Pacific rim countries, and elsewhere overseas.

I'd like to stop here and interject something that wasn't in my statement. The gentleman from Chessie this morning kept mentioning the improvement to the Baltimore facilities and to the Newport News facilities. He failed to mention that these were not being done by the railroad. Both of these improvements are private industry.

Mr. Chairman, my full statement on this subject is rather lengthy; therefore I propose to summarize my remarks briefly, and request that the full statement be included in the record of this hearing. Also, I am joined by Constance Holmes, NCA vice president for international trade and executive director of CEA, together with Joseph Lema, NCA vice president for transportation, who are prepared to assist in responding to any questions following my testimony on behalf of NCA and CEA.

The U.S. has an abundant amount of coal reserves, about 435 billion tons. We have substantial capacity for mining coal; in fact, we produced 830 million tons last year, and U.S. coal producers could have produced an additional 100 to 150 million tons in 1980 with mining capacities in place, and would have done so had sufficient markets existed. And, our inland water transportation systems, particularly the railroads and water carriers, have basic capacity required to move coal for domestic consumption and to ports involved in exporting coal overseas.

As reported by the railroad industry, U.S. railroads could have moved 20 percent more coal than they carried in 1980 with railroad equipment the railroads already had on hand. And our inland waterway system, especially the Mississippi and Ohio Rivers and their tributaries, and the Warrier and Mobile Rivers, which furnish ready access to the gulf for coal produced in the eastern, central and western coal-producing States, often through intermodal linkages with railroads, has much more basic capacity for moving bulk commodities such as coal and grain having export destinations than is now utilized. Further, coal slurry pipelines which have not yet been extensively used but are proven and economic ways to move coal, can furnish a great amount of added capacity for long haul movement of coal whether for domestic consumption or for export overseas.

Therefore, the United States has the coal, the coal production capacity, and the coal transportation capability to bring substantially higher tonnages of coal to coastal ports and to Great Lakes ports for ultimate delivery to overseas markets; and we can do so with current technology and the combined economies of scale associated with modern inland transportation utilizing unit trains on our railroads, towboats handling 15 to as many as 40 barges on the lower Mississippi River operated by inland water carriers, and slurry pipelines capable of carrying less than 5 million to more than 50 million tons of coal per year governed by their individual sizes of pipe and ancillary equipment utilized. So we are optimistic that we can fully meet the demand for U.S. coals abroad for years ahead.

However, with respect to inland transportation for coal exports, NCA and CEA believe that we must stimulate greater private sector competition for the movement of coal in order to keep transport prices reasonable and to constantly strive for higher efficiency across the mix of practical long haul coal transportation systems available; that is, the railroads, the inland water carriers, and potentially, new coal slurry pipeline systems.

Where there is no effective competition for the movement of coal, particularly where railroads have market dominance over coal transportation, it is essential to be assured that the railroads holding monopoly positions in regard to coal traffic, are not allowed to impose excessively high prices for transportation of captive coal movements.

Railroads carry 65 percent of total U.S. coal production, about 500 million tons were moved by rail carriers last year. NCA studies show that 85 percent of the coal carried by the railroads has no practical alternative transportation available. Coal, and especially export coal, is clearly captive to the railroads to a broad degree.

With this in mind, NCA was highly interested in legislation on railroad regulatory reform, or railroad deregulation, enacted last year. We supported the Staggers Rail Act of 1980 as enacted on October 14, 1981, because we believed that the Staggers Act held significant promise for achieving well balanced reform matching needs of rail carriers for rail pricing flexibility and of rail market dominant shippers for captive shipper protection against excessively high rail rates and inadequate service due to their vulnerability to monopolistic abuses. We still believe that the Staggers Act is sound; but the same critical balance found in the legislation as enacted about 14 months ago is not present in subsequent regulatory moves by the Interstate Commerce Commission.

In order to overcome the difficulties created by the commission, which undercut the captive shipper protection provided by the Staggers Act, we believe Congress should act swiftly to preserve the intent of the legislation by considering legislation which would:

Set forth in the law on interstate commerce, previous definitive and measureable tests for determining rail market dominance which were eliminated by the ICC in its decision served on July 8 and made effective on August 7, 1981, so that captive shippers will have reasonable recourse for relief against monopolistic abuses as intended by the Congress and provided in the Staggers Act.

Establish in the law on interstate commerce, that the Interstate Commerce Commission shall be prohibited from exempting from regulation any noncontract traffic that is determined to be rail market dominant pursuant to the tests set forth in the law.

Provide Federal eminent domain for interstate coal pipelines which are granted a certificate of public convenience and necessity—two bills, S. 1844 and H.R. 4230, have been introduced and should receive early consideration on the Senate and House floors so that the construction of coal pipelines deemed to be in the national interest can move forward and effective competition for coal traffic can be realized without further delay.

Mr. Chairman, we believe that these legislative actions are of great importance in order to assure that inland transportation for export coal will be reasonable in price, adequate in level of service, and dependable.

This concludes my testimony. Thank you for allowing me to offer our views.

[The prepared statement of Mr. Holbrook follows:]

STATEMENT

OF

WYNSTON D. HOLBROOK

VICE PRESIDENT - SALES
A. T. MASSEY COAL COMPANY, INC.

Mr. Chairman, my name is Wynston D. Holbrook. I am Vice President - Sales of A. T. Massey Coal Company. Our corporate office is located in Richmond, Virginia. I am appearing before you on behalf of the National Coal Association and the Coal Exporters Association. My company is a member of NCA and CEA. A. T. Massey Coal Company President, E. Morgan Massey, who is out of the country and can not be here today, is the Chairman of the NCA Transportation Committee.

Because we are closely involved in the transportation programs of NCA and CEA, I especially welcome the opportunity to appear before you on the important subject of inland transportation for export coal. This is also of high importance to A. T. Massey Coal Company. We have been engaged in coal production and sales for 65 years. This year we will produce 15 million tons and purchase an additional 8 million tons for a total of 23 million tons of coal. Of this total, 14 million tons will be marketed domestically, and 9 million tons, nearly 40 percent, will be exported.

Clearly then, this subject is of keen interest. NCA and CEA recognize that efficient inland transportation, reasonably priced, is a key element in assuring that U. S. coal, today and in future years, will be competitive in the array of worldwide sources for coal and will realize its full share of the world market for both metallurgical and steam coals. We firmly believe that railroads, inland water carriers, and slurry pipelines can provide the competitive mix needed for effective long haul movements of coal to be exported to various world coal markets.

In this regard, I would like to note that my company is in the process of adding to U.S. port capacities for coal exports by building a 12 million tons per year coal port terminal at Newport News, Virginia and a 2.5 to 8 million tons per year facility at Charleston, South Carolina, scheduled to commence operations in 1982 and 1983. We also are participating in new coal port facilities planned by consortiums for Portsmouth, Virginia and for Baltimore, Maryland. As you can see, coal exports, at present and for the future, represent a major component of our business. We closely share, therefore, the overall concerns of the coal industry that inland transportation of coal to coastal ports must be reasonable in price, adequate in level of service, and dependable. This will enable our Nation's outstanding capability to serve worldwide coal markets to be utilized to the fullest extent and thereby improve substantially our balance of payments in international trade due to broad marketability of U.S. coal in Europe, the Pacific Rim countries, and elsewhere overseas.

We realize clearly that greater utilization of U.S. coal abroad can be expected during the 1980s and beyond, as long as we see growth in competitive transportation keeping pace with future demands for our coals in the worldwide energy marketplace. Before I go on with my comments concerning the movement of coal, I would like to emphasize a key point on which future success in securing, for U.S. coals, a full share of the world energy marketplace, highly depends.

This is simply the necessity of adequate competition among the mix of transportation systems available to move coal.

Transportation competition among railroads, water carriers, and slurry pipelines is fundamental to allow market forces to keep rates reasonable for service provided.

The ability of our rail and water carriers to move large tonnages of export coal to coastal ports dependably and economically obviously is a key to accomplishing greater use of coal. Unit trains carrying 10 to 12 thousand tons per train movement and barges handling 20 to 25 thousand tons per tow and up to 60 thousand tons per tow on the Lower Mississippi River, clearly demonstrate proven capabilities of the railroads and of water transport systems to carry coal with substantial economies of scale. Further, modern automated loading, transloading and unloading facilities underscore the highly efficient technology available to move coal.

We have the coal (about 435 billion tons of reserves), the coal mining capacity, and the inland transportation capability to bring U.S. coal to ports and overseas markets economically and dependably. We produced 830 million tons of coal last year, but we could have mined 100 to 150 million more tons with mining capabilities already in place had sufficient markets existed. The railroad industry says that rail carriers could have moved 20 percent more coal traffic than they experienced, again with rail equipment the carriers already had on hand. And, the inland waterways have a great deal more basic capacity than is now utilized to move coal. With this in mind, NCA is cautiously optimistic that U.S. coals can meet expected growth in coal markets abroad in the years just ahead, particularly by the end of the 1980s. This expectation is underscored by the recognized ability of our rail and water carriers to handle today's demand and to stay abreast of growth in coal transportation demand over the years.

An important objective, therefore, is to assure that adequate capacity for moving coal is matched by effective competition through the coming years with respect to intermodal coal movements. Through competition in the transport sector, NCA believes that coal transportation services will be dependable and efficient and that transport prices will be reasonable for the quality and quantity of services provided. Competition among practical, long haul transport modes for shipping coal is considered to be a major factor in allowing U.S. coals to reach their full potential in world markets.

Total U.S. coal production has grown from 691 million tons in 1977 to 830 million tons in 1980, a 20 percent increase in the past four years. NCA forecasts that total annual coal production in 1990 will reach about 1.35 billion tons, an increase of 62 percent above 1980. Exports of U.S. coal overseas have been particularly spectacular in the past four years, rising from 36.5 million tons in 1977 to 72 million tons in 1980, an increase of about 97 percent. Overseas exports are expected to grow to 118 million tons annually by 1990, a further increase of about 64 percent above 1980. Clearly then, we can anticipate significantly higher demands on our inland transportation systems and on our ports during the present decade as consumption of U.S. coals expands in this decade.

To meet increasing demand for competitive transportation, we believe that:

- Rail carriers and coal shippers should make extensive use of transportation contracts now explicitly lawful under the 1980 Staggers Rail Act to match long term coal supply agreements with dependable, specific traffic service over many years.
- Severe transportation capacity constraints encountered at some lock and dam installations on certain inland rivers should be eliminated immediately to facilitate the movement of coal.
- Eminent domain should be furnished to enable coal slurry pipelines determined to be in the public interest to acquire rights-of-way that cannot be obtained through private negotiations.
- Channels and harbors at coastal ports should be dredged to provide greater depths of water necessary to accommodate higher capacity vessels for exporting U.S. coal.

MORE RAILROAD TRANSPORTATION CONTRACT SERVICE SHOULD BE UTILIZED

The long standing, broad bond between coal and the railroads can be strengthened materially now that the Staggers Rail Act of 1980, for the first time, explicitly authorizes rail carriers and shippers to enter into contracts for specific transportation service. My purpose in emphasizing contract service is simple. It is, after all, essentially non-regulated transportation service that can be arranged in a businesslike manner between private parties having a mutual interest in coal marketing and delivery systems.

Until the Staggers Rail Act of 1980 was enacted, a question existed as to the lawfulness of rail transportation service contracts in regard to whether dedication of certain rail carrier manpower, equipment and facilities to specific traffic violated its common carrier obligation. The Staggers Act removes any uncertainties about the lawfulness of contract service; one of the key aspects of the legislation that we found to be most desirable, influencing our decision to support the Act. NCA long has advocated the use of contract service, and has supported the notion of allowing rail carriers to operate both as common carriers and as contract carriers, in the latter sense essentially in a non-regulated fashion. We, therefore, welcome a recent trend toward more contracting for coal movement between rail carriers and shippers. More than two dozen railroad transportation service contracts have been entered into for movement of coal produced in eastern, central and western coal-producing states to consumers in the U.S. and to ports for overseas export of U.S. coals since the 1980 Act was signed into law 13 months ago. This is regarded as a positive sign that the 1980 Act works in part.

NCA IS GRAVELY CONCERNED ABOUT THREE RECENT ACTIONS BY THE INTERSTATE COMMERCE COMMISSION

However, we are gravely concerned about three recent actions by the Interstate Commerce Commission which have grievous implications for coal, and are likely to subvert the notion of contracting for railroad transportation service because they create a serious disincentive for railroads to enter into negotiations with captive shippers on coal traffic service. These actions are identified under proceedings: Ex Parte Nos. 320 (Sub-No. 2), 346 (Sub-No. 7), and 347 (Sub-No. 1), before the Interstate Commerce Commission.

The Commission's Decision To Wipe Out Rational Tests For Determining Rail Market Dominance Is Wrong And Must Be Corrected Immediately.

Our belief that the 1980 Act represents a balanced approach to fair and equitable railroad regulatory reform has been shaken substantially by the Commission's recent decision to wipe out long standing, rational tests for determining whether certain traffic is rail market dominant, and therefore entitled to seek relief from the Commission when a captive shipper encounters monopolistic abuses in terms of excessively high rail rates or inadequate transportation service due to the shipper's vulnerability to dominance in the hands of a carrier. This decision of the Commission under Ex Parte No 320 (Sub-No.2) is wrong, is contrary to the overall goals of the 1980 Act which include captive shipper protection, and must be corrected immediately so that responsible implementation of the Act can proceed as intended.

NCA filed comments citing the errors contained in the Commission's proposals at several stages of this proceeding prior to the decision to eliminate previous tests for determining the existence of rail market dominance. We were ignored by the Commission; and now, much to our dismay, we find ourselves in litigation against the Commission and its decision served on July 8, 1981 becoming effective 30 days thereafter. NCA presently has standing as an intervenor in litigation before the U.S. Court of Appeals for the Fifth Circuit which seeks to correct the problem created by the Commission in its decision to wipe out rational tests for determining market dominance; a decision which blatantly disregards the 1980 Act's provisions on captive shipper protection by making a showing of market dominance virtually impossible. We did not believe that our support for effective, balanced railroad regulatory reform through the 1980 Act would ever be so casually subverted by the Commission through the abrogation of its responsibility to furnish timely, positive recourse for captive shippers when they encounter monopolistic abuses, as the Commission has shown by its July 8, 1981 decision on rail market dominance.

Now we must urge that the previous, straightforward presumptions of market dominance be reinstated; namely, the high railroad market share (70 percent) test, the substantial shipper investment in rail-related facilities test, and the revenue (rate) - to - variable cost test adjusted somewhat to reflect the jurisdictional thresholds which are established under the 1980 Act. Otherwise, imprecise and highly arbitrary guidelines stated by the Commission in its July 8, 1981 decision which became effective August 7, 1981 will continue to replace rational and acceptable standards which are measurable and can be used in a timely fashion in decisionmaking on the existance of competition for traffic in question. The Commission's new guidelines rely on consideration of some thirty factors bearing generally on the existance or absence of effective competition upon which it says it will be willing to receive evidence.

The effect of the new guidelines is to compound greatly a shipper's burden in making a showing of market dominance. The gist of the Commission's guidelines is whether commodities involved could have been acquired from different sources using other carriers or whether other commodities could have been substituted for the traffic in question, again carried by different carriers. Such evidentiary guidelines on geographic and product competition would cause the earlier definitive presumptions of market dominance to be replaced by a full blown adjudicative proceeding to determine market dominance, lacking even tentative benchmarks for decisionmaking. They ignore the fundamental issue of basic relevance; that is, could the traffic be moved practically using other transportation than provided by carriers alleged by shippers to represent the only viable supplier of transportation for a movement.

NCA Urges The Congress To Consider Legislation On Market Dominance.

We urge the Congress to consider swiftly legislation which would amend the Interstate Commerce Act further in order to establish in a definitive manner, the conditions under which traffic is found to be subject to market dominance. NCA suggests that three conditions would be appropriate for this purpose:

- the shipper has substantial capital investment in rail-related plant(s) or equipment for the movement; or
- the railroad(s) carry 70 percent or more of the traffic at issue; or
- the ratio of revenue-to-variable cost is higher than five percentage points above the jurisdictional threshold ratio presently in effect pursuant to the 1980 Act.

We believe that these conditions accurately and reasonably set out circumstances under which a movement is rail market dominant; and, if any one of the three conditions exist, the shipper should have ready access to the Commission for relief from rates that are excessively high for the service provided or from inadequate levels of service.

NCA Further Urges The Congress To Consider Legislation On Exemptions.

An issue of similar concern to the recent decision on rail market dominance is the Commission's consideration of a proposal to exempt from regulation export coal traffic carried by railroads to the East, Gulf and West Coasts of the U.S. A proceeding, Ex Parte No. 346 (Sub-No.7), has been instituted by the Commission following the petition of several coal-carrying railroads in which the Commission will decide whether export coal traffic should be exempted from regulation as now possible under Title 49, United States Code, as amended by the 1980 Act. This notion constitutes a serious effort to undercut in a grievous manner, the captive shipper protection afforded in present law.

It represents a gross misuse of the statutory exemption provisions in the law previous to the Staggers Act, and as amended by the Act last year The Conference Report to the Staggers Act makes clear that the Congress has recognized that coal is captive to the railroads and should be subject to regulatory protection against monopolistic abuses in rates and service. It is almost inconceivable that one of the first applications to the Commission to take advantage of the exemption provision in present law is for export coal movements.

NCA studies show that 85 percent of the coal carried by the railroads has no practical alternative transportation available. Trucks are not economic or energy-efficient for long haul movements of heavy tonnages of coal or other similar bulk commodities. Water transportation is not possible in many instances due to the absence of navigable waterways. And, coal slurry pipelines are not yet in place, except for one installation in the southwestern portion of the U.S. There simply is a serious lack of competitive transportation for much of the coal produced in the U.S.

Indeed, export coal is especially subject to rail market dominance, since not only must the coal be shipped by railroad from the mine, it also is almost always loaded aboard ocean vessels at railroad-owned port terminals.

It is not credible to assert, as the railroads do, that regulation of coal movements is unnecessary to prevent abuse of market power they hold. It plainly would be a miscarriage of the statutes to exempt export coal. Should an exemption be granted as now considered by the Commission, rail carriers would not be required to meet common carrier obligations for a classic example of captive traffic, export coal, a circumstance that we consider intolerable and not in the national interest. We also wonder if this potential abrogation of Commission responsibility is but a signal that other captive coal traffic, other export commodity movements such as grain, fertilizers, and chemicals, and rail movements of most bulk commodities whether for export or for domestic terminations, would also face prospective loss of captive shipper protection. This certainly is not in conformance with the intent of Congress in enacting the Staggers Act.

For the reasons previously given, and with the current propensity of the Commission to disregard its responsibilities with respect to captive shippers in mind, we urge the Congress to consider legislative action which would prohibit the Commission from exempting from regulation pursuant to Title 49, United States Code, any rail market dominant traffic as determined by any one of the three tests that I have stated earlier except rail traffic carried under contract service which is essentially non-regulated under present law as amended by the Staggers Act. To exempt captive traffic from regulation is an unmistakable circumvention of the 1980 Act; the ongoing effort to exempt export coal traffic thus requires prompt, decisive action by the Congress to avert further consideration of the errant proposal now before the Commission.

The Interstate Commerce Commission Must Recognize That Cross Subsidization Is Wrong.

The Commission, in a pending proceeding on nationwide railroad coal rate guidelines, Ex Parte No. 347 (Sub-No.1), is considering a new scheme under which coal would be called upon to contribute a much higher amount of a rail carrier's revenue for meeting its fixed costs. Essentially, the question in this proceeding is how to allocate fixed costs among shippers. The Commission is seen to be leaning strongly to cost allocation methodology that would place too high a share of railroad fixed costs on captive coal traffic.

The Commission begins with the notion of differential pricing and carries this to a conclusion that it would prefer to place the largest share of railroad fixed costs on the shippers most captive to the railroads, that is, coal shippers. This approach clearly leads to extensive cross subsidization of other rail traffic by coal, a scheme that the Commission must realize is wrong, and inconsistent with the 1980 Act.

To replace allocation methodology where fixed costs are allocated based on the ratio of revenues generated by the traffic to total revenues, the Commission proposes to utilize its so-called ton-and-ton-mile formula which would place a large share of railroad fixed costs on coal traffic because of its weight and long haul characteristics. We opposed the proposal, on which a decision is still pending. Our fundamental argument is that it would be contrary to the 1980 Act for the Commission to adopt a standard requiring coal to subsidize other rail shippers.

In contrast, we proposed an avoidable cost methodology which would have the Commission do a better job of identifying those costs that are attributable to particular traffic, reduce the unallocated cost pool, and assure that both competitive and non-competitive rail traffic is required to contribute sufficient revenues to cover their legitimate share of railroad fixed costs. Thus, cross subsidization is avoided, and the 1980 Act's directive to eliminate non-compensatory traffic is suitably accommodated.

On the other side, the railroads challenged the adoption of the Commission's proposed ton-and-ton-mile methodology for allocating railroad fixed costs for different reasons. They said that it would produce too low rail rates for carrying coal. Instead, the railroads proposed the adoption of "Ramsey pricing", a form of demand-based pricing whereby shippers who are more captive would pay a greater portion of railroad fixed costs than others having competitive alternatives. Clearly, coal is a target for the railroads' approach to capturing higher revenues. NCA has asked the eminent Cornell University economist, Dr. Alfred E. Kahn, to analyze the railroads' proposal. Among Dr. Kahn's findings and conclusions, he makes four key observations:

- First, the implicit assumptions of railroad economists that unrestricted "Ramsey pricing" is necessary so long as a railroad fails to earn the current cost of capital on its entire net invested capital is questionable;
- Second, the railroads' apparent assumption that principles of economic efficiency require captive shippers to contribute to a return on railroad facilities that do not serve them is not valid;
- Third, "Ramsey pricing" on the basis of differences in demand elasticity of various groups of customers that are attributable to the presence or absence of intramodal competition raises serious questions--which the railroads have not confronted--about both economic efficiency and fairness; and

- Fourth, the railroads should not be permitted the unrestricted exploitation of captive coal shippers entailed by unconstrained "Ramsey pricing" so long as they continue to restrict competition by obstructing the entry of coal slurry pipelines into the transportation market.

TO PROVIDE EFFECTIVE COMPETITION FOR COAL MOVEMENT, FEDERAL EMINENT DOMAIN SHOULD BE GRANTED COAL SLURRY PIPELINES

This leads to an obvious and basic question of how to enable greater competition for coal movement so that market forces can be called upon to keep coal transport rates reasonable and stimulate the transportation industry toward constant efforts to increase the efficiency of coal movement and thereby hold down transport costs. The answer is simple. Construction of coal slurry pipelines should be encouraged and facilitated by granting federal eminent domain, an important factor in the acquisition of essential rights-of-way for this proven, economic, and user-paid-for coal transportation system.

We urge the Congress to move quickly in considering legislation which would provide federal eminent domain for interstate coal slurry pipelines that are granted a certificate of public convenience and necessity through an expeditious procedure for handling applications submitted for its consideration. Such legislation has been introduced in the House of Representatives. A bill, HR 4230, the Coal Pipeline Act of 1981, is now under consideration by the House Committees on Interior and Insular Affairs and on Public Works and Transportation.

We strongly support HR 4230 as introduced in the House of Representatives, and urge that similar legislation in the form of S 1844 introduced in the Senate on November 12, 1981 should be considered expeditiously.

We believe that federal eminent domain for interstate coal pipelines now properly is within the responsibilities of the federal government and represents a critical factor in accomplishing greater use of coal, our most abundant energy resource. U.S. coal producers already are broadly and intensively competitive in the supply of coal from mines in all coal-producing areas of the U.S. Now we need better competition among coal transporters to let market forces fully interact toward keeping the delivered price of coal reasonable -- an important strategic goal of great benefit to the consumers of energy.

The 1980 Act has given the railroads a valuable mechanism for competing effectively with other transport systems, including pipelines. The lawfulness of railroad transportation contract service is now clear. The railroads can contract for coal shipments over many years, thus the rail carriers are in a good position to compete for coal traffic with slurry pipelines. The major thrust behind the 1980 Act was to make our railroads more competitive in the transport sector of our economy. This has been achieved. Now we should move ahead with legislation that will enable competition for coal traffic to be facilitated by granting coal slurry pipelines federal eminent domain. No public monies are needed, no federal programs are created, and no subsidization is required for this purpose. Surely, we should no longer delay passage of such vital and timely legislation.

Mr. Chairman, I have concluded my testimony, and would be glad to respond to questions. Thank you for allowing me to present our views on inland transportation for export coal.

# # # # #

Senator **Warner**. Have you taken any position on recent coal haul road legislation introduced in Congress?

Mr. **Holbrook**. I might let Joe Lema respond, because in some instances the company view may be very different.

Mr. **Lema**. The National Coal Association takes no position on Federal assistance for coal haul road improvements realizing that the need for such improvements varies greatly in the eastern, central, and western coal producing states due to the dominance of local coal haul road problems in certain areas and not others. We are a national trade association and we find it necessary to take no position on that question.

Senator **Warner**. Thank you very much.

Mr. Corder, thank you.

STATEMENT OF ROBERT G. CORDER, RAIL DIVISION ADMINISTRATOR, VIRGINIA DEPARTMENT OF HIGHWAYS AND TRANSPORTATION, RICHMOND, VA.

Mr. **Corder**. Thank you Mr. Chairman. My name is Robert G. Corder. I'm representing the Virginia Department of Highways and Transportation. The department appreciates this opportunity today to relay its concerns and problems in dealing with the coal haul situation.

My prepared remarks are rather brief, so with your permission I'll speak directly from those.

Virginia ranks 15th among the leading U.S. coal reserve States with virtually all of its coal reserves located in seven southwestern counties—Buckanan, Dickenson, Wise, Lee, Russell, Scott, and Tazewell. Three of these counties—Buckanan, Wise, Dickenson—account for 80.8 percent of Virginia's reserves. These seven coal counties produced 41 million tons of coal in 1980, ranking the State seventh in coal production among all the coal-producing States. With the changeover from oil to coal as an energy-producing source, coal production is expected to increase dramatically in the future.

Railroads carry virtually all Virginia-produced coal to either consumers in the United States or to port for transshipment; however, railroads originated only 20.2 percent of the coal from the actual minesites in 1980 as compared to 86.1 percent in 1946. This, of course, represents a major shift in originating coal transport from rail to truck.

Trucks originated 13.2 times as much Virginia coal in 1980 as they did in 1946. This major shift has occurred for various reasons. As the older mines have become depleted, coal producers have increasingly shipped coal from new mines to the existing rail network by truck utilizing the highway network. The railroads, absent the opening of a major coal reserve relatively near the existing rail network, have insufficient incentive to adjust their network because of the sometimes difficult terrain and associated costs involved.

Trucks, on the other hand, can haul coal profitably over short distances and the roadways are already in place in most instances. Unfortunately, linear miles of highway have increased only 8.5 percent in the coal region while the increase in coal haul originating by truck has increased 1,224 percent.

The tremendous increase in the origination of coal transport by truck has produced severe highway deterioration on the approximately 838 miles of rural roads in the coal mining area of the State. A recent, 1980, study conducted by the department's maintenance division revealed that roadway maintenance costs per mile in the coal counties exceed maintenance costs in noncoal counties—having similar terrain and climate—by a factor of approximately 2.7 for any given year. None of the roads were originally constructed with either sufficient capacity or strength to withstand the rigorous combination of the heavy truck traffic now being experienced and the severe freeze-thaw cycles in the winter months.

In 1979, the Vigiinia Department of Highways and Transportation, along with 15 other States, submitted a report to the Federal Highway Administration concerning the extent of improvements needed on the coal haul roads in Virginia. This estimate of needs was for the target year 1985 and amounted to approximately $317,400,000 for Virginia in order to bring the coal haul roads up to design standards suggested by the Federal Highway Administration. This cost estimate includes such things as resurfacing, widening, reconstruction, relocating, bridge structures, and rail/highway grade crossing improvements. The majority, 55 percent, of the roads are on the Federal-aid system in rural areas and serve either an arterial or collector function.

The estimate of coal haul needs for the seven-county area compares to only $124 million available in fiscal year 1981 for maintenance of the State's entire 43,850 miles secondary road system. In recognition of the coal haul road problem, the State legislature authorized a total of $7 million for the 1979–81 biennium to be spent for bridge repair or replacement of the coal haul roads. This money was taken from the highway revenues, which effectively reduced the amount of funds available to other parts of the State for the 2-year period. Also, the legislature authorized counties and cities to levy a 1-percent gross receipts tax on coal severed within their borders. Moneys raised by this method are paid into a special fund called the coal road improvement fund and can only be expended for coal haul road improvements. This fund amounted to $6,842,000 in 1980. Even with these additional moneys added to the regular secondary roads maintenance funding—$124 million in fiscal year 1981—the needs gap is still quite large.

In addition to the problems posed for the coal haul roads in the coal mining counties of Virginia, the increased transport of coal by rail throughout the State creates a strong concern for the safety and delay aspects at existing grade crossings. The Port of Hampton Roads, for instance, exported 50 percent more coal in 1980 than in 1979. Additional increases are expected as evidenced by proposals to build a 26 million-ton capacity coal export facility in Portsmouth and a 15-ton capacity facility in Newport News. Concern is especially acute in the urban areas and in rail corridors where general traffic will also increase due to the mergers of four major railroad companies which operate in Virginia.

Of the 2,850 public rail/highway grade crossings statewide, 353 are located in those rail corridors expected to experience significant increases in traffic. The magnitude of cost to upgrade crossing protection at these crossings and provide grade separations as needed is estimated to be $50 million.

In view of the needs gap at current funding levels and the possibility of a decrease in future highway revenues at both the State and Federal levels, it is quite obvious that the funding situation will only get worse unless some other action is taken. In recognition of the vast contribution of the Virginia coal mining industry to the national energy effort and economy, the funding needs stated, and the fact that the majority of the coal haul roads are on the Federal-aid system, the Commonwealth of Virginia would welcome assistance at the Federal level in dealing with this problem.

I thank you for the opportunity to address to coal hauling problems and concerns from Virginia's point of view. If you have any questions I will be happy to try to answer them. If I cannot, I will certainly see that the answers are obtained and forwarded to you.

[The attachments to Mr. Corder's statement follow:]

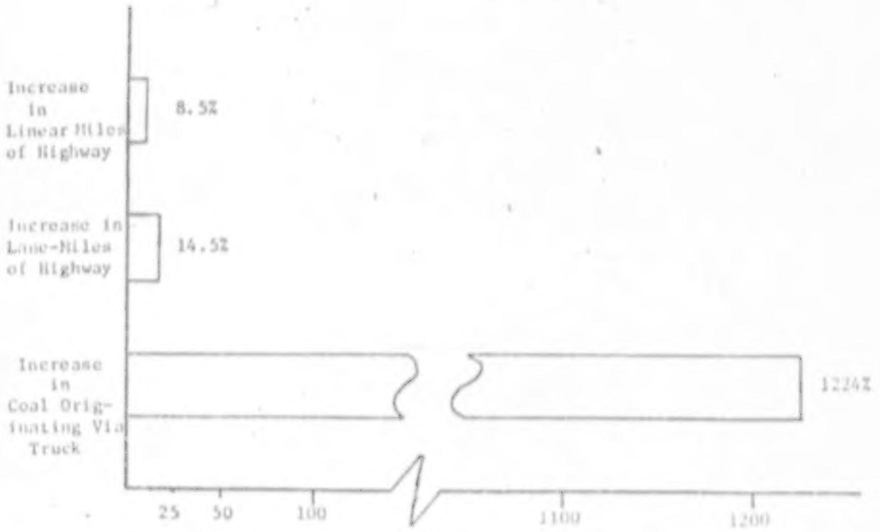
TABLE 1

Virginia Coal Production Initially Transported by Truck or Rail, 1946-1980
(selected years)

	1946	1947	1948	1949	1950	1955	1965	1970	1975	1977	1979	1980
Total Virginia Coal Production (millions of tons)	15.57	20.37	19.21	16.01	17.58	21.85	34.06	34.97	35.51	37.51	37.04	41.00
Initially Truck Hauled (millions of tons)	2.16	4.36	5.36	6.00	6.32	10.03	22.58	17.14	23.37	27.46	26.04	28.60
(percentage)	13.9%	21.4%	27.9%	37.5%	36.0%	46.7%	66.3%	49.0%	65.8%	73.2%	70.3%	69.8%
Initially Rail Hauled (millions of tons)	13.41	16.01	13.85	10.01	11.26	11.77	11.43	17.83	12.14	10.05	11.00	12.40
(percentage)	86.1%	78.6%	72.1%	62.5%	64.1%	54.5%	33.7%	51.0%	34.2%	26.8%	29.7%	30.2%
Ratio, Annual Truck-Hauled Coal to Base Year (1946) Truck-Hauled Coal	1.0	2.02	2.48	2.78	2.93	4.67	10.45	7.94	10.82	12.71	12.06	13.24

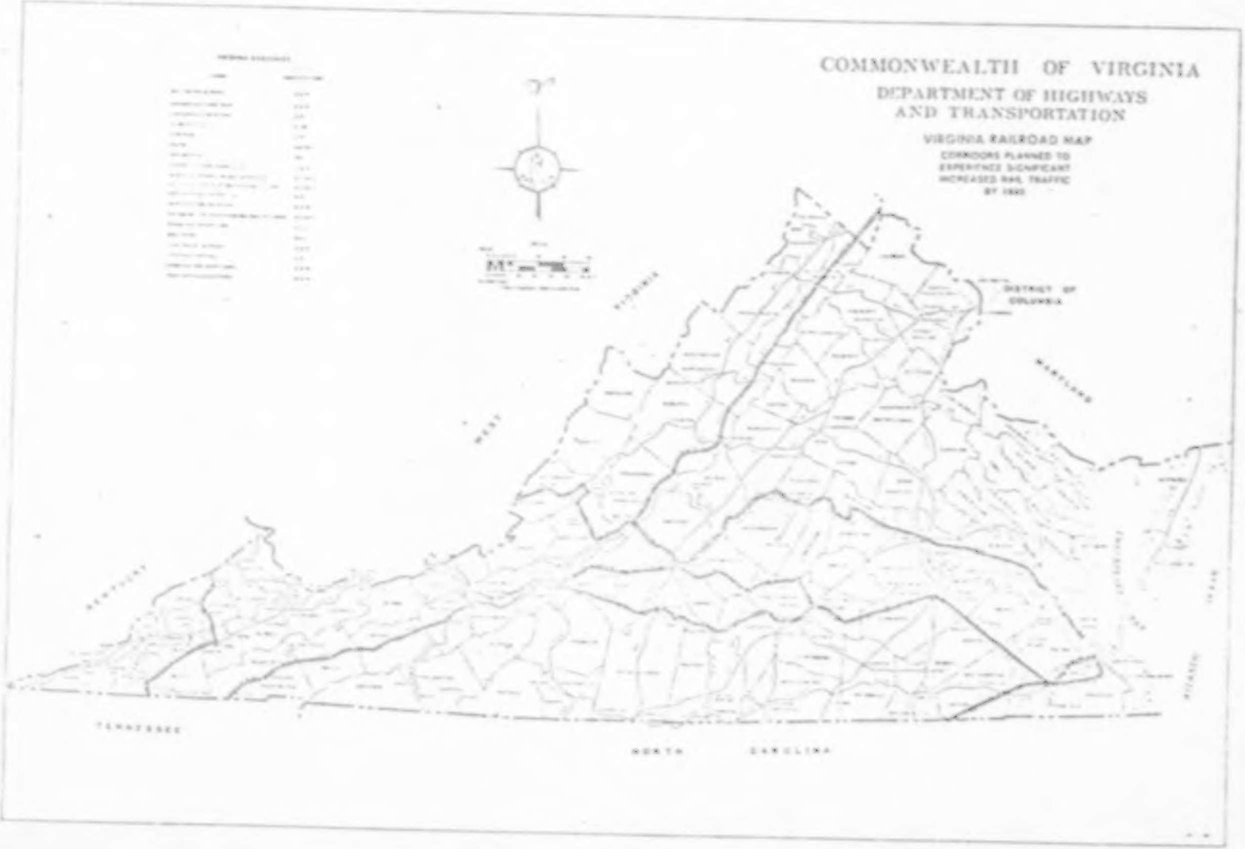
Source: Virginia Department of Labor and Industry, Annual Report for (Selected Years), Richmond.

FIGURE 1



Percentage Increase, 1 January 1966 - 1 January 1981
Comparison of Southwest Virginia Coal Area's
Increase of Highway Network (Linear and Lane-Miles)
With Increase of Coal Originating Via Truck

FIGURE 2


COMMONWEALTH OF VIRGINIA
DEPARTMENT OF HIGHWAYS
AND TRANSPORTATION
VIRGINIA RAILROAD MAP
CORRIDORS PLANNED TO
EXPERIENCE SIGNIFICANT
INCREASED RAIL TRAFFIC
DISTRICT OF COLUMBIA
MARYLAND
WEST VIRGINIA
KENTUCKY
TENNESSEE
NORTH CAROLINA
ATLANTIC

Senator **Warner**. Your testimony is very clear.

Perhaps you saw where Barnhart, the Federal Highway Administrator suggested an increase in the gas tax. Do you suppose that might trickle down to your level and provide you a little help?

Mr. **Corder**. Yes, sir, I think that would help. I'm not sure that it would completely cover the gap, but it would certainly help.

Senator **Warner**. Having traveled in those counties many, many times, I am fully aware of the concern of the people about the roads. As you know, Senator Huddleston has introduced a bill that might provide for the repair. Has your department taken a position on that bill yet?

Mr. **Corder**. No, sir.

Senator **Warner**. Are you familiar with it?

Mr. **Corder**. Yes, sir.

Senator **Warner**. I would appreciate it if you would take a position on it.

This has been a very good hearing despite its length, but I wanted to make certain that all who attended had a chance to be heard.

Thank you.

[Whereupon, at 4:10 p.m., the hearing was adjourned, subject to the call of the Chair.]

APPENDIX

ADDITIONAL MATERIAL SUBMITTED BY HON. REESE H. TAYLOR, JR., CHAIRMAN, INTERSTATE COMMERCE COMMISSION

Interstate Commerce Commission
Washington, D.C. 20423
OFFICE OF THE CHAIRMAN

December 3, 1981

Honorable John W. Warner
Chairman
Subcommittee on Energy and Mineral Resources
Committee on Energy and Natural Resources
United States Senate
Washington, D. C. 20510

Dear Chairman Warner:

Thank you for your request for information to aid in your study of the domestic coal transportation network. The Commission has noted with interest the series of hearings being held by your Subcommittee on the role of the United States in the world coal export market and welcomes this opportunity to apprise you of our activities in this area.

As you may know, the Commission testified recently before the Senate Committee on Commerce, Science, and Transportation at oversight hearings on implemention of the Staggers Rail Act. In our testimony, we summarized all of the rulemaking proceedings undertaken pursuant to the Act, including several involving market dominance determinations and the possible exemption of export coal which may be of particular interest to your Subcommittee. Since this statement presents the recent activities of the Commission in the rail area in a detailed and comprehensive way, I am enclosing a copy of it for your information and for inclusion in the hearing record.

Again, I appreciate your request for the Commission's comments on this important issue. If I can be of any further assistance, please let me know.

Sincerely yours,

Reese H. Taylor, Jr.
Chairman

Enclosure

STATEMENT OF REESE H. TAYLOR, JR., CHAIRMAN,
INTERSTATE COMMERCE COMMISSION
BEFORE THE SURFACE TRANSPORTATION SUBCOMMITTEE
OF THE SENATE COMMITTEE
ON COMMERCE, SCIENCE, AND TRANSPORTATION
ON
THE STAGGERS RAIL ACT OF 1980

November 10, 1981

Mr. Chairman and members of the Subcommittee:

I want to thank you for the opportunity to appear here today to present the views of the Commission with regard to the implementation and effects of the Staggers Rail Act of 1980. In addition to the following statement, we have included: (1) a table listing all Ex Parte proceedings conducted pursuant to the Act showing the status of the proceeding; (2) a brief summary of each Ex Parte proceeding; and (3) a brief summary and list of all litigation involving the Staggers Act. We have also attached a short list of various problems we have had in interpreting the Act and some suggestions for technical amendments to clarify the intent of Congress in these matters.*

Introduction

The Staggers Rail Act of 1980 significantly reformed Federal regulation of railroad transportation in an attempt to remedy the railroads' financial plight. The Act was intended to assist the rail system to remain viable in the private sector of the economy and to allow the railroads to compete more effectively among themselves and with other modes of transportation.[1] To this end, the Act modernized the economic regulation of railroads to place a greater reliance on the marketplace and to remove unnecessary regulation while providing a regulatory process that balances the needs of carriers, shippers, and the public. Given this overall mandate, the Commission in the last year has conducted numerous proceedings, many of which were specifically required by the new statute. In implementing the Act, we have been cognizant of the increased emphasis on competition and on regulatory policy which would foster sound economic conditions in transportation and allow efficient rail carriers to earn adequate revenues. We have attempted to balance the competing interests of all parties while complying with the letter and the spirit of the Staggers Act.

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*Appendices I, II, III and IV, respectively.

We believe that in general we have succeeded in this endeavor, and that the result (although it is still too early for definitive statements) will be a more healthy, competitive industry with benefits accruing to all concerned. The Staggers Act, and our implementation of the Act, has been successful, in our view, in removing unneeded regulatory burdens while retaining the protection afforded by regulation where there is an absence of effective competition. While the full effects of the changes cannot easily be measured at this time, the legislation has had a significant impact. I am pleased to report that the Commission has moved forward expeditiously, despite the difficulty in simultaneously implementing new rail and motor carrier legislation. Most of the key rulemakings have now been completed, so by the time of the next oversight hearings, it should be possible to determine more definitively how well the policy goals of the Staggers Rail Act have been met.

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[1] The goals of the Act, as set forth in Section 3, are as follows: (1) to assist the railroads of the Nation in rehabilitating the rail system in order to meet the demands of interstate commerce and the national defense; (2) to reform Federal regulatory policy so as to preserve a safe, adequate, economical, efficient, and financially stable rail system; (3) to assist the rail system to remain viable in the private sector of the economy; (4) to provide a regulatory process that balances the needs of carriers, shippers, and the public; and (5) to assist in the rehabilitation and financing of the rail system.

Today, however, we can make some general observations on the effects of the Act. Have rail carriers' earnings improved under the Act? We think so.

Data is available for three quarters since the passage of the Staggers Act. During that period, ending June 30, 1981, Class I net railway operating income has risen 38 percent to $1,215 million from $878 million in the same 1979-1980 nine-month period. Since railroad traffic increased by less than one-half of one percent (705 billion revenue ton miles vs. 702 billion revenue ton miles), three principal factors could be responsible for the increase in operating income:

(1) Rates rising faster than costs.

(2) Improved traffic mix.

(3) A combination of the first two.

Our study indicates that the traffic mix has deteriorated as the result of the current recession. Movements of high-rated manufactured products, such as automobiles, are down from even the depressed levels of 1980. Lumber and wood product shipments have been adversely affected by the sharp decline in housing starts.

As to costs, we have no evidence that the railroads are deferring maintenance in order to report higher earnings. Maintenance expenses are the main area where the railroads can "manage" their income accounts. Maintenance levels, in real terms, have risen in recent years and as of yet we see no evidence of any sharp cutback although results vary from railroad to railroad. Should the recession deepen, we would expect to see maintenance levels decline.

This leaves higher rates as the main reason for the advance in rail earnings over the nine-month period ending June 30, 1981. While we cannot prove that this is due to the Staggers Act, our feeling is that the Act has succeeded in contributing to the improvement in rail earnings.

A second way to judge the impact of the Staggers Act is by how much its new provisions are utilized. Unlike the period after the Railroad Revitalization and Regulatory Reform Act of 1976 (4R Act) when little had happened one year later, there has been major activity in a number of areas under the Staggers Act. For example, more than 650 rail rate contracts have been filed with the Commission since the effective date of the Act. We now receive about 100 new contract rate filings per month by all sizes and types of rail carriers on a wide variety of commodities. The most active railroads in the contract rate area to date include the Missouri-Kansas-Texas, Southern Railway, the Chicago and North Western, the Milwaukee Road, Norfolk & Western, the Southern Pacific, Burlington Northern, Conrail, and the Atchison, Topeka, & Santa Fe Railway Company. The high number of filings indicates that both carriers and their customers see positive effects in the contract rate provisions of the Staggers Rail Act. We believe the contract provisions are among the most important in the Act, and we predict that the filings will continue to increase as more railroads and shippers become aware that contracts offer answers to a wide variety of transportation problems.

There has also been considerable use of the joint rate surcharge and cancellation provisions of the Act. During the past year, 113 surcharges became effective, 67 of which were filed by Conrail. Included in the 113 surcharges were 37 applying to traffic over light-density lines. It should also be noted that 10 Class III rail carriers filed 27 of the 113 surcharges. Our preliminary estimate is that the surcharging railroads collected $10.2 million in revenues from the surcharges during the year. While the level of activity has been high in this area, we would stress that relatively few shipments are subject to this type of charge. We estimate that only one-half of one percent of all carloads are subject to surcharges. A list of surcharge filings is included in Appendix V.

Another important Staggers Act change is the expansion of the Commission's exemption authority under 49 U.S.C. § 10505. The Commission can now use its exemption authority whenever its regulation is unnecessary to effectuate the rail transportation policy of section 10101a and either (1) the transaction or service is of limited scope or (2) regulation is not necessary to protect shippers from the abuse of market power. The amendment was clearly intended to broaden the Commission's exemption powers.

Since passage of the Staggers Act, the Commission has modified and streamlined its exemption procedures. We have finalized the exemption of TOFC/COFC traffic and proposed, further, related exemption of certain railroad operations in the trucking area. The TOFC/COFC exemption has been affirmed in all significant respects by the Court of Appeals for the Fifth Circuit. According to reports we have received, many rates on fruits and vegetables are lower and service has substantially improved.

The Commission is actively considering exemptions in a number of other areas. Possible exemption of export coal traffic and light-density line abandonments has been proposed. Conrail has filed a petition seeking exemption of boxcar traffic. Use of the exemption in the securities area to eliminate delays in bringing a public offering to market is being studied. Another candidate for exemption is trackage rights applications or joint ownership or joint use agreements under 49 U.S.C. 11343(a)(6). As a practical matter, these transactions are rarely opposed (except by labor, which we would propose would still receive the standard protective conditions) and are routinely approved. Computer and other empirical research efforts are being utilized to study rail transportation of all commodities, to determine which rail services meet the statutory criteria for exemption.

I would like to turn now to a discussion of particular provisions of the Act and the Commission's implementing decisions.

TITLE-BY-TITLE ANALYSIS
OF THE IMPLEMENTATION AND
EFFECTS OF THE STAGGERS ACT

Title II - Railroad Rates And Inter-Carrier Practices

This title provides the railroads with substantially more rate freedom than was afforded prior to the Staggers Act. Generally, in the absence of market dominance, a rail carrier may establish a rate at any level it desires (absent discrimination) so long as it contributes to going concern value. The title also establishes a revenue-variable cost threshold below which the Commission has no jurisdiction over the reasonableness of rates. If the carrier has market dominance and the rate exceeds the jurisdictional threshold, the Commission must determine whether or not the rate is reasonable.

In determining whether a rate is reasonable, the Commission is required to recognize the policy that rail carriers are to earn adequate revenues. Basically, this title eliminates rate regulation where there is effective competition. It also encourages carriers to use new marketing techniques by permitting contracts, permissive limited liability rates, entertainment expenses, and premium charges to encourage better car utilization. Surcharges are permitted without the concurrence of other parties to the joint rate to assure that carriers may earn revenues of 110 percent of variable costs or close routes not providing this level of earnings.2/ Provisions in this title also simplify

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2/ Except for light density lines, the authority to establish surcharges expires in 1983 unless extended for one additional year by the Commission.

coordination, minor merger procedures, entry, and reciprocal switching agreements. Finally, title II encourages the Commission to utilize its expanded exemption authority so as to regulate only where necessary to protect against abuses of market power.

In order to implement this title, the Commission conducted over 30 Ex Parte proceedings. An attachment to this statement provides a brief summary of all of these proceedings. At this point we would like to discuss some of the more far-reaching and pivotal of these decisions, as well as those Committee staff indicated were of special interest.

Ex Parte No. 320 (Sub-No. 2), Market Dominance Determinations and Considerations of Product Competition

Accurate market dominance determinations are central to fulfilling the goals of the Staggers Act, namely, that competition and demand for services are to be the determining factor in railroad rates except where there is an absence of effective competition.

Ex Parte No. 320 (Sub-No. 2) reflects the provisions of the Staggers Act and our experience to date with the market dominance rules established pursuant to the 4R Act. Basically, the proceeding had two purposes: (1) the reexamination of existing market dominance regulations; and (2) a determination, as mandated by section 205 of the Staggers Act, whether and to what extent "product competition" should be considered in determining the reasonableness of rates.

Our decision in this proceeding eliminates the prior rebuttable presumptions of market dominance based on cost, market share, and substantial investment. The presumptions have been replaced with general guidelines. Because of the wide variation in circumstances from case to case, we believe the flexible approach we have adopted will provide a more useful and reliable method for determining the railroads' market power in a given situation.

With regard to product and geographic competition, we concluded that these factors should not be considered in our reasonableness determinations. Since such assessments are based primarily on a comparison of the challenged rate and the cost of a movement, consideration of product competition (which has little, if any, bearing on costs) would provide no additional insight. Moreover, product competition would be difficult to quantify in this context. In our view, the concept is more relevant as an evidentiary tool to be used, as we have in the past, in determining whether a carrier is market dominant vis-a-vis particular traffic.[3]

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[3] Under our prior regulations, product and market competition were not considered germane in computing market share, but such evidence could be introduced to show that effective competition existed.

Ex Parte No. 399, Cost Recovery Percentage

Section 202 of the Staggers Act required the Commission to calculate, within six months of passage of the Act and annually thereafter, the cost recovery percentage (CRP) for all rail traffic. The Act defined the CRP as that ratio of revenue to variable cost which, if all rates above it were deemed to have produced only revenues resulting in the cost recovery percentage, would, in the aggregate, when combined with total revenues from other traffic, provide revenues sufficient to cover industry-wide variable plus fixed costs (including a return to equity and debt, calculated at the embedded debt level). The CRP would not have an actual regulatory use until October 1, 1983 if the CRP is less than 175 percent or October 1, 1984 if it is above that level, at which time it becomes the threshold revenue/variable cost level for assertion of Commission jurisdiction over rail rates. The statute further prescribes that in no event can the CRP be less than 170 percent or more than 180 percent.

For purposes of meeting the six-month statutory deadline, the Commission decided to use the Rail Form A costing methodology to set the initial CRP level. Before October 1, 1983 (the earliest date on which the CRP could become effective), the Commission decision can be revised to reflect changes and improvements in costing techniques, such as adoption of a new Uniform Rail Costing Methodology, now being considered by the Commission.

The Commission decision was issued on April 1, 1981 and set the CRP at 197.5 percent. Since the statute prohibits it from being set higher than 180 percent, it would, if actually in effect, be set at that level. The decision explained in some detail how the figure was derived, and noted that it reflected a large volume of traffic now moving at rates below variable cost. With passage of the Staggers Act and changes in joint rate procedures and minimum rate standards, the decision expressed the view that there will be less traffic moving below variable cost, and that the CRP will be correspondingly lowered.

Ex Parte No. 393, *Standards for Railroad Revenue Adequacy*

The Staggers Act and the legislative history emphasize the railroads' need for adequate revenues to rehabilitate the rail system in order to meet the demands of interstate commerce. While the statutory definition of revenue adequacy was not changed,[4] the Act directed the Commission to conclude an adequate revenue proceeding within 180 days and to determine which rail carriers are earning adequate revenues within the same 180-day period and on an annual basis thereafter.

In Ex Parte No. 393, mandated by section 205 of the Act, the Commission determined that a railroad will be considered revenue adequate if it has a rate of return equal to the current cost of capital. In assessing the value of a railroad's investment base for the initial determination of revenue adequacy, the Commission used the sum of the original cost of track assets, betterments to track, and the depreciated book value of all other assets. The investment base was not adjusted to reflect special tax provisions such as accelerated depreciation and investment tax credits. The cost of capital was calculated using the current cost of debt and equity for the rail industry, and a debt-equity ratio of 40:60. This calculation results in a cost of capital of 11.7 percent, based on 1979 data.

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[4] See section 10704(a)(2).

In this proceeding, the Commission repealed earlier standards and procedures which had established a range of revenue adequacy, with the high value measured by the cost of capital and the low value based on a funds flow analysis. In revising the standards, the Commission pointed out that the low level calculation using funds flow analysis was never intended as a long term level of adequate revenue. The Commission also noted that the prior standards were inappropriate in view of the Staggers Act provisions limiting rail pricing flexibility under various sections for rail carriers earning adequate revenues.5/

5/ See, for example, section 203, Zone of Rate Flexibility. Section 217 of the Act also provides greater freedom in applying surcharges for carriers not earning adequate revenues.

In its decision, the Commission indicated that a new proceeding would be opened to consider whether to use replacement (rather than historical) cost in calculating the investment base, and whether the appropriate revenue adequacy measure is the railroad's own (rather than an industry-wide) cost of capital.

Ex Parte No. 290 (Sub-No. 2), Railroad Cost Recovery Procedures

This proceeding implemented section 203 of the Staggers Act; the section provides that the Commission shall publish a "rail cost adjustment factor" at least quarterly as a basis for a zone of rate freedom to compensate the railroads for cost increases due to inflation. The Commission's decision adopted as the most acceptable measure of changes in rail costs the input price index compiled by the Association of American Railroads, as supplemented by the Producer Price Index for those costs not covered by the AAR Index, corrected and modified by the Commission as necessary. The ICC rules, based on forecasted increases in expenses, replace prior general increase procedures and authorize inflation-based increases without regulatory delay. Various parties contended that the AAR index, which is an index of the costs of railroad transportation inputs, necessarily overstates the increase in the cost of producing railroad outputs (transportation services) to the extent productivity increases occur. The Rail Act does not specify whether an input cost index or an output cost index is to be used as the rail cost adjustment factor. The Commission concluded that an adjustment to reflect productivity gains was not warranted at this time while the rail industry is earning inadequate revenues. The Commission will continue to study possible alternatives to the index, including development of an ICC composite index, and to make revisions and modifications as appropriate. The index procedures are available for collective adjustment of rates until at least April 1, 1982.

Ex Parte No. 387, Railroad Transportation Contracts

As previously indicated, there has been substantial use of the contract provision, section 208 of the Staggers Act. Proposed implementing rules have been issued in Ex Parte No. 387. We have attempted to devise workable rules that will encourage the filing of contracts--without impairing the rights of protestants. While the proposed rules were to become effective on an interim basis, those rules were stayed by the Commission following institution of a court action. However, the record in this proceeding is now complete and a decision will be issued shortly. In the meantime, we have been evaluating contracts on a case-by-case basis.

A Contract Advisory Service has been established within the Commission to provide advice to interested parties and to disseminate the summaries of contract filings; the Service appears to be functioning smoothly. It has met with hundreds of shippers and the officials of most major railroads. The mailing list developed by the Contract Advisory Service includes over 2,200 interested shippers and carriers, all of whom receive non-confidential contract summaries and other information in accordance with section 208 of the Act. In appropriate instances, the Commission has used its exemption power to shorten the notice period for contract filings.

Ex Parte No. 388, State Intrastate Rail Rate Authority

Under section 214 (new section 11501(b)), we have an affirmative obligation to certify a State authority once we determine that the standards and procedures submitted by the State are in accordance with Federal law. The Commission instituted this proceeding to review filings by State authorities seeking certification. These filings were reviewed and found not to contain information in sufficient detail to justify the requisite statutory findings. We then issued a subsequent notice indicating our concern, seeking more information, and provisionally certifying all 40 States which had applied.6/ We are now in the process of reviewing additional submissions filed by 36 States.

6/ The States that did not request certification, and those which have not refiled under our order, have lost jurisdiction to regulate intrastate rail transportation.

During this time we have received and timely acted upon a significant number of requests for relief by rail carriers under §11501(c) alleging that actions of certain States were not in accordance with the statute. As the Commission stated in Ex Parte No. 388, every effort will be made to assist the States in meeting their responsibilities under the new law.

Ex Parte No. 411, Complaints Filed Under Section 229 of the Staggers Rail Act of 1980

The rate freedom provided by the Staggers Rail Act begins with a rate level known as the "base rate." In general, the base rate is the rate in existence on October 1, 1980. However, the Act provides an exception: complaints alleging that existing rates are unreasonably high may be filed within 180 days from the effective date under section 229. During that period, which expired on March 30, 1981, 864 complaints were filed.

In an attempt to organize the processing of this tremendous number of complaints, we developed procedures for their handling which are different from those typically used. First, we required the railroads to file answers to them and urged both sides to submit joint responses. We specifically requested information with regard to whether settlement was contemplated, whether the Commission's offices would be useful in bringing about settlement, whether oral hearing, cross-examination, or other procedural tools would be necessary in particular cases, and whether certain proceedings could and should be consolidated. Second, we announced our intention to handle in two stages those cases that did proceed to formal adjudication. The first stage would address solely the issue of market dominance in order that time and expense would not be devoted to developing evidence that would not be used because we did not have jurisdiction to review the rate. If market dominance is established, the Commission would then proceed to the second stage to take evidence and analyze the reasonableness of the challenged rate. In response to our request, the parties have filed numerous pleadings.

On October 29, 1981, the Commission's Chief Administrative Law Judge held a docket management conference to refine further the procedures for handling these complaints. A substantial number of the complaints have been settled or dismissed. As to the remaining complaints, numbering 737 at this time, a report detailing the plan for processing will be issued by the Administrative Law Judge within the next several days. The Commission is optimistic that pending settlement negotiations will be successful in many instances, and that the final number which must be processed will be considerably lower than 737.

Ex Parte No. 403, Rail Carrier Cargo Liability Study

Section 211(d) of the Staggers Act required the Interstate Commerce Commission to recommend to Congress within one year of enactment whether rail carriers should continue to be subject to 49 U.S.C. section 11707. That section codifies the common law governing carrier cargo liability, providing a uniform strict liability standard for railroads and other transportation companies.

The Commission's report to Congress did not recommend that rail carriers be exempted from section 11707. With respect to specific issues raised by section 211(d), the Commission recommended that the Interstate Commerce Act be amended to: (1) eliminate the venue restrictions of the Staggers Act; (2) provide the courts with authority to award attorneys' fees to successful claimants; and (3) remove the $10,000 jurisdictional threshold for access to Federal courts. The Commission decided not to recommend: (1) exemption of non-market dominant traffic from section 11707; (2) imposition of a comparative negligence standard; (3) imposition of a no-fault standard; (4) changes in applicable substantive laws; (5) changes in time limits; or (6) statutory provisions governing special or consequential damages. The Commission pointed out, however, that in the absence of market dominance, the only effect of requiring full liability rates may be the publication of excessively high rates in those cases where rail carriers choose to limit their liability through released rates.

The report was sent to Congress and made available to the public on September 30, 1981.

Ex Parte No. 282 (Sub-No. 7), Special Intermodal Authority

This proceeding implements new section 11344(e) which was added by section 228 of the Staggers Act. This section permits a rail carrier or its affiliate, together with affected shippers, to file an application for motor carrier service prior or subsequent to rail transportation where rail service by other railroads is inadequate. Interim rules were adopted and proposed as final.

Few comments to the notice were received, and no applications have been filed under the interim rules. This provision may be less important now that we have exempted from regulation TOFC and COFC movements by railroad companies in Ex Parte 230 (Sub-No. 5).

Ex Parte No. 282 (Sub-No. 3) and (Sub-No. 8), Railroad Consolidation Procedures and Railroad Consolidation Procedures Time Revisions

These proceedings revise procedural and informational requirements and the time limits for applications by rail carriers under 49 U.S.C. §§ 11343-11346. The revised procedures affect rail mergers, consolidations, acquisitions of control, purchases, leases, contracts to operate property of a carrier and trackage right agreements.

In September, 1980, in Ex Parte No. 282 (Sub-No. 3), the Commission adopted changes to its procedural regulations that had been proposed for comment the preceding November, and published proposed informational regulations. Several months later, in Ex Parte No. 282 (Sub-No. 8), the

Commission proposed (and made effective on an interim basis) changes to the time limits applicable to rail consolidation proceedings to implement ~~s~~Section 228 of the Staggers Act.

The regulatory changes in Ex Parte No. 282 (Sub-No. 3) were developed primarily to ensure that the amount and kinds of information required in an application will vary in accordance with the significance of the transaction involved. Informational requirements have been reduced for some transactions. Other transactions subject to our jurisdiction have been deemed to have no regulatory significance and have been exempted from the Commission's regulation.

Other revisions, for the most part technical in nature, have been proposed in response to comments received from concerned parties. Such changes are aimed primarily at clarifying the regulations and streamlining various stages of these proceedings.

Ex Parte No. 282 (Sub-No. 6), Railroad Consolidation Procedures, General Policy Statement

This proceeding is a revision of the Commission's policy statement governing rail consolidations. Between the time when the first Notice was published and the final regulation was adopted Congress enacted the Staggers Act. As a result of that action the Commission revised its notice in two ways.

First, the policy statement was limited to cases involving the merger or control of at least two Class I railroads. This was necessary because of the change in section 11344 setting different criteria for other rail consolidations.

Second, the Staggers Act added a new statutory criteria for mergers involving two Class I railroads. The Commission was explicitly required to consider the effect on intramodal competition.

In general the policy statement discusses the importance of rail consolidations in furthering national policy to rationalize the Nation's rail facilities and reduce excess capacity. It explains the statutory factors the Commission must examine as well as the balancing test employed in determining whether the transaction is in the public interest. It also discusses Commission policy on: conditioning consolidations; inclusion of other carriers; labor protection; cumulative impacts and crossover effects; and public participation.

Title III - Railroad Cost Determinations

This title provides for the creation of a Railroad Accounting Principles Board to establish principles for determining economically accurate railroad costs directly and indirectly associated with a particular movement of goods. The Board is to establish these principles within two years of enactment of the Staggers Act. Once established, the Commission is to promulgate rules to implement and enforce them. To date, this Board has not been funded. Also, the Report of the House Committee on Appropriations on the 1982 Legislative Branch Appropriations Bill, Report No. 97-170, to accompany H.R. 4120, (P.L. No. 97-51), at page 37, after recommending no funding for the Board, states that the Commission's new accounting system should be given the opportunity to achieve the necessary objectives before initiating another effort which may create confusion and redundancy.

This title also requires a preliminary and final certification by the Commission of rail carriers' cost accounting systems.

In this same general area, I would like to mention that the Uniform Rail Costing System (URCS) has been completed and is now being commented on by railroads, shippers and the public in general. As you are aware, this system has been under development for some time and the railroad industry, shippers and general public have been kept informed and invited to give views on changes and improvements. Thus far, we have every reason to believe URCS is a vast improvement over Rail Form A, the rail costing methodology used over the last 40 years. We have yet to finally conclude that the regression formulas which determine railroad variability are the ones that should be used. We are waiting for public comment on these. Presently, we contemplate implementing URCS by the early Spring of 1982.

Title IV - Railroad Modernization Assistance

This title establishes a new feeder railroad development program which gives shippers and interested persons (other than Class I or II railroads) the opportunity to acquire a rail line carrying less than 3,000,000 gross ton-miles of traffic per mile in the preceding year if the railroad is not providing adequate service. Three years after enactment, any rail line may be acquired under this provision. The Commission may require a carrier to sell a line to a financially responsible person if the public convenience and necessity requires the sale or if the line is listed on the carrier's system diagram maps in category 1 or as potentially subject to abandonment under category 2.7/

7/ We should note that the Northeast Rail Service Act of 1981 (NERSA) could have a substantial adverse impact on the feeder line program. Because the listing of lines on a system diagram map is no longer a prerequisite to Conrail abandonments pursuant to NERSA, Conrail has withdrawn its map. This precludes future feeder line applications for Conrail lines unless applicants can meet the more difficult public convenience and necessity criteria of section 10910(c)(1).

Most of the interest which has been expressed in using the feeder line program has been directed at Conrail lines. Therefore, these changes will probably affect the use of this program substantially. (Footnote continued on next page).

The Commission implemented this provision in Ex Parte No. 395, Feeder Railroad Development Program. Our rules require offerors to submit evidence that they are capable of paying the constitutional minimum value of the line and of providing adequate service for 3 years. The rules are designed to encourage privately-negotiated agreements. We will set the value only if the parties fail to agree. We are currently processing two competing applications, and several notices of intent to file feeder applications have also been received.

Title IV also establishes new time limits for considering abandonment applications and discontinuance of service. Applications for abandonments which are not opposed are to be granted within 45 days. For applications which are opposed, the Commission must process and decide the case within nine months. The Commission implemented this provision in Ex Parte No. 274 (Sub-No. 6), Abandonments of Rail Lines and Discontinuance of Service. The most

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7/ (continued)

We note also, however, that lines for which Conrail files abandonment applications may still be acquired by others through offers of financial assistance under section 10905 because the provisions of NERSA direct offerors to use the procedures under 10905(d)-(f). One potential problem here is that Conrail could seek such high divisions with potential purchasers of Conrail lines under section 10905 that these purchases will never be consummated. A possible solution for this would be to amend 49 U.S.C. 10905(3) to include language tracking either the language used in connection with discount purchases of Conrail property under section 1156(a) of NERSA (section 308(e)(3)(A) of the 3R Act) or that found in section 10910(f) of the feeder line program.

significant changes caused by these rules are in: (1) the time frames governing the processing of abandonment and discontinuance applications; (2) the elimination of the automatic right to appeal initial decisions; and (3) the procedures for making offers of financial assistance either to subsidize continued operations or to purchase the rail line being abandoned.

Concerning appellate procedures, the final rules interpreted section 10904(c)(3) to allow an opportunity for appeal from an initial decision in an abandonment proceeding only where an investigation has been conducted. In those cases, it is a matter of Commission discretion whether an appeal will be heard. Although there is no opportunity to appeal from decisions in protested but not-investigated proceedings, the final rules allow parties to petition to reopen these proceedings after issuance of the administratively final decision. Finally, since the amended statute requires the Commission to grant all unprotested abandonments, there is no provision for administrative review of decisions in these proceedings. In the event of procedural defects (such as the loss of a protest in the mail, timely filed protests not coming to the attention of the decisional body, the failure of the applicant to afford the public the requisite notice of its proposed abandonment, etc.) the Commission will entertain petitions to vacate certificates issued in nonprotested proceedings.

In the financial assistance area, the final rules detail the procedures for filing offers. Moreover, the rules describe the mechanism which allows the parties to request the Commission to intercede and establish the conditions and amount of compensation for subsidy or purchase of the line.

Title V - Conrail Title V Labor Protection

This title modifies the labor protection provided to Conrail employees. The Commission was not required to implement or oversee its provisions, and thus will not comment on the title. We would note, however, that new Conrail labor protection provisions have since been enacted in the Northeast Rail Service Act of 1981.

Title VI - Expedited Supplemental Transaction Proposals

This title required the Secretary of DOT, within 240 days after the effective date of the Staggers Act, to determine whether to propose a supplemental transaction for the transfer of all rail properties of Conrail in Connecticut and Rhode Island to another carrier in the region. If he had so proposed, USRA, the Commission, and the subject States were to comment on the proposal. No such proposal was submitted by the Secretary, and the section has been replaced by a new Connecticut-Rhode Island provision in the recent Conrail legislation.

Title VII - Miscellaneous Provisions

The only provision of this title particularly relevant to Commission actions deals with the Alaska Railroad. The Commission was required, within six months of enactment of the Staggers Act, to complete a study to determine whether certain rail-water contract rates of the Alaska Railroad would, if such rates were entered into after enactment of the Staggers Act, have violated section 10701a(c)(1) of title 49, United States Code, as amended by the Act. That section specifies that a rate cannot be considered to be below a minimum reasonable level if it contributes to going concern value; rates that equal or exceed variable cost (defined to include only those costs varying directly with the level of service), are conclusively presumed to contribute to going concern value.

The study, conducted by the Bureau of Accounts in Ex Parte No. 405, Alaska Rail Rate Study, found the contract rates to be well above the minimum reasonable level. The study required the Commission to examine several different cost levels because of peculiarities of the Alaska Railroad's cost center accounting system and allocation of the FY 1980 Alaska Railroad capital subsidy. The minimum level was approximated by excluding capital costs and certain overhead; rates on the traffic at issue on average were 245 percent of that level and 175 percent of a "direct cost level" which would include allocable capital subsidy and would approximate Rail Form A variable costs. A subsequent study for a Congressional Appropriations Committee found the Alaska Railroad's rail-water traffic in general (of which the contract rate traffic is only a part) to be profitable, although not as profitable as the traffic considered in Ex Parte No. 405.

SUMMARY

The Commission is of the view that the Staggers Act is a sound and forward-looking law, and that our experience with it has been generally favorable. To some degree the effects of this law are not yet clear, and in most instances legislative changes do not appear desirable until more experience has been gained. The Staggers Act overall was a necessary response to a difficult and complex situation, and we have every reason to believe that it will be beneficial both to the rail industry and the public over the long run. Should problems of a serious nature later become evident, we will of course recommend further change.

Thank you for this opportunity to comment. I will be pleased to respond to any questions you may have.

IMPLEMENTATION OF THE STAGGERS RAIL ACT

Staggers Act	Proceeding	Status
Sec. 201	Ex Parte No. 355 - Cost Standards for Railroad Rates	Decision served 10/80 and 5/12/81.
Sec. 202	Ex Parte No. 320 (Sub No. 2) - Market Dominance Determinations and Considerations of Product Competition	NPR served 12/11/80. Decision on market dominance. Petitions for reconsideration subsequently denied.
	Ex Parte No. 399 - Cost Recovery Percentage	Notice of Proposed Costing Standards served 1/28/81. Further notice and decision served 4/1/81. Comments under review.
Sec. 203	Ex Parte No. 290 (Sub-No. 2) - Railroad Cost Recovery Procedures	Decision served 4/17/81. Clarification served 9/30/81.
Sec. 204	Ex Parte No. 394 - Cost Ratio for Recyclables - 1980 Determination	Decision served 1/5/81. Decision on remand served 10/13/81.
Sec. 205	Ex Parte No. 320 (Sub No. 2) - Market Dominance Determinations and Considerations of Product Competition	NPR served 12/11/80. Decision on product competition served 5/18/81.
	Ex Parte No. 393 - Standards for Railroad Revenue Adequacy	NPR served 11/26/80. Decision served 3/30/81.
	Ex Parte No. 416 - Railroad Revenue Adequacy, 1980 Determination	Served 9/17/81.

IMPLEMENTATION OF THE STAGGERS RAIL ACT, page 2

Staggers Act	Proceeding	Status
Sec. 206	Ex Parte No. 290 (Sub-No. 2) - Railroad Cost Recovery Procedures	Decision served 4/17/81. Clarification served 9/30/81.
Sec. 207	No. 37130 (Sub-No. 1) - Special Docket Proceedings - Waiver of Insignificant Amounts and Simplification of Procedures	NPR served 1/21/81. Comments under review.
Sec. 208	Ex Parte No. 387 - Railroad Transportation Contracts	Notice of interim rules served 10/24/80. Changed to proposed rules 12/16/80.
Sec. 209	Ex Parte No. 324 - Demand Sensitive Rates	Regulations repealed 11/4/80.
Sec. 210	Ex Parte No. 327 - Rate Incentives for Capital Investment	Regulations repealed 11/4/80.
Sec. 211	Ex Parte No. 390 - Rail Rates Based on Limited Liability	Final rules served 12/22/80.
Sec. 211(d)	Ex Parte No. 403 - Cargo Liability Study - Report to Congress	Notice served 3/19/81. Report submitted 9/30/81.
Sec. 213	Ex Parte No. 400 - Modification of Procedure for Handling Exemptions Filed Under 49 U.S.C. 10505	Notice published 12/24/80.
	Ex Parte No. 230 (Sub-No. 5) - Improvement of TOFC/COFC Regulation	Decision served 2/19/81.
	Ex Parte No. 230 (Sub-No. 6) - Improvement of TOFC/COFC Regulation (Railroad Affiliated Motor Carriers and Other Motor Carriers)	NPR served 2/19/81.
	Ex Parte No. 346 (Sub-No. 7) - Railroad Exemption - Export Coal	NPR served 9/3/81.

IMPLEMENTATION OF THE STAGGERS RAIL ACT, page 3

Staggers Act	Proceeding	Status
Sec. 214	Ex Parte No. 388 - State Intrastate Rail Rate Authority	Notice published 11/10/80. Decision served 4/22/81.
	Ex Parte No. 409 - Rail Carrier Informational State Tariff	NPR served 5/26/81. Decision served 11/5/81.
Sec. 215	Docket No. 37465 - Business Entertainment Expenses	NPR served 12/24/80. Extension served 2/13/81.
Sec. 216	Docket No. 37517 - Reduction of Notice Period for Filing Railroad Tariffs	Notice served 12/29/80; rules became effective on publication in FR.
	Ex Parte No. 398 - Protests Against Tariffs and Rules of Practice Governing Procedures in Certain Suspension Matters	Decision published 12/3/80.
Sec. 217 (b)(2)(B)	Ex Parte No. 402 - Reasonably Expected Costs	NPR served 1/26/81. Draft decision under review.
Sec. 217(h)	Ex Parte No. 389 - Procedures for Requesting Rail Variable Cost and Revenue Determinations for Joint Rates Subject to Surcharge or Cancellation	NPR and interim requirements served 3/23/81.
Sec. 218	Ex Parte No. 322 (Sub-No. 1) - Revised Procedures for Divisions of Revenue Cases	NPR served 10/16/81. Comments are being filed.
Sec. 219	Section 5b Application No. 2, 3, & 6 - Western, Eastern, and Southern Rate Bureau Agreements.	Decision served 1/21/81.
Sec. 220	Ex Parte No. 346 (Sub-No. 3) - Rail General Exemption Authority - Long and Short Haul Transportation	NPR served 12/9/80. Comments under review.

Staggers Act	Proceeding	Status
Sec. 221	Ex Parte No. 392 - Application Procedures for a Certificate to Construct, Acquire or Operate Railroad Lines	NPR served 8/28/81. Comments due 10/15/81.
Sec. 228	Ex Parte No. 282 (Sub-No. 6) - Railroad Consolidation Procedures (general policy statement)	Served 2/2/81.
Sec. 228	Ex Parte No. 282 (Sub-No. 7) - Special Intermodal Authority	Notice served 11/18/80. Interim rules in effect. Comments under review.
Sec. 229	No. 37622 - Petition for Declaratory Order - Existing Railroad Rates	Decision served 3/20/81.
	Ex Parte No. 411 - Complaints Filed Under Sec. 229 of the Staggers Rail Act of 1980	Notices served 4/28/81 and 6/10/81.
Sec. 401	Ex Parte No. 395 - Feeder Railroad Development Program	Adoption of interim rules served 12/12/80. Final rules served 7/9/81.
Sec. 402	Ex Parte No. 274 (Sub-No. 6) - Abandonment of Railroad Lines and Discontinuance of Service	Notice of interim rules served 11/25/80. Final rules served 9/10/81.
Sec. 709	Ex Parte No. 405 - Alaska Railroad Freight Rates Study - 1980	Notice published 1/6/81. Decision served 3/10/81 clarifying scope of study.

APPENDIX II

ICC Rulemaking Proceedings Implementing The Staggers Rail Act of 1980

Section 201 --	Ex Parte No. 355. Proceeding instituted prior to Staggers Act; decision interpreting minimum rate provisions issued on July 9, 1980. Subsequent decision interpreting 49 U.S.C. 10701, as amended by the Staggers Act, served May 12, 1981.
Section 202 --	Ex Parte No. 320 (Sub-No. 2). The Commission revised its basic market dominance rules, withdrawing the earlier-used rebuttable presumptions and replacing them with guidelines. The decision contained an explanation of the issues and evidence considered relevant to market dominance determinations. Final decision served July 8, 1981.*
	Ex Parte No. 399. For purposes of meeting the six-month statutory deadline, the Commission decided to use the Rail Form A costing methodology to set the initial cost recovery percentage (CRP) level. Before October 1, 1983 (the earliest date on which the CRP could become effective), the Commission decision could be revised to reflect changes and improvements in costing technique (for example, adoption of a new Uniform Rail Costing Methodology, now being considered by the Commission). Decision served April 1, 1981.
Section 203 --	Ex Parte No. 290 (Sub-No. 2). The Commission adopted a cost recovery adjustment factor revising existing rules and procedures for the filing of general rate increases by railroads. The new rules simplified and expedited recovery of inflation-based cost increases through the use of a zone of rate freedom, the top of which is based on an index of railroad costs. Decision served April 17, 1981; clarification issued on September 23, 1981.

*Dates in this appendix refer to final decisions.

Section 204 --	Ex Parte No. 394. The Commission developed the revenue to variable cost ratio of 146 percent for the transportation of recyclable materials and determined that rates above the ratio could not be subject to any further increases but did not need to be reduced. Order served January 5, 1981. On October 13, 1981, the Commission issued a decision on court remand directing all railroads immediately to reduce all relevant recyclable rates to the 146 percent level and to make refunds.
Section 205(a) --	Ex Parte No. 320 (Sub-No. 2). The Commission determined that product competition should not be considered in determining rail rate reasonableness. The Commission continues to consider product competition as part of its market dominance review. Decision served May 18, 1981.
Section 205(b)(2)--	Ex Parte No. 393. The Commission established as the only standard of revenue adequacy for railroads a rate of return on investment equal to the cost of capital. The term "cost of capital" was defined as the current rate of return that a railroad must offer to investors in order to attract additional capital through the sale of securities. Decision served March 30, 1981.
	Ex Parte No. 416. The Commission determined that the following three railroads achieved an adequate return for 1980--the Fort Worth & Denver Railway Co., the Clinchfield Railroad Co., and the Pittsburgh & Lake Erie Railroad. Decision served September 17, 1981.
Section 206 --	Ex Parte No. 290 (Sub-No. 2). The Commission decided not to implement Section 206 at this time, but to adopt the more flexible approach to general rate increases contained in section 203. Decision served April 17, 1981.

Section 207(c)--	Docket No. 37130 (Sub-No. 1). The Commission has proposed standards and procedures whereby rail carriers can waive collection of insignificant amounts due from shippers in connection with rate increases which are suspended and later found to be reasonable. The Commission has also proposed simplified procedures to eliminate unnecessary delay and paperwork and to open up the process to public scrutiny. Notice of Proposed Rulemaking served January 12, 1981. Comments under review.
Section 208 --	Ex Parte No. 387. The Commission developed proposed rules to govern the process of contract filing, complaints, and approval and disapproval of contracts between rail carriers and purchasers of rail service. Notice served October 24, 1980. Decision will be issued shortly.
Section 209 --	Ex Parte No. 324 (Sub-No. 1). The Commission repealed its regulations regarding seasonal, regional, or peak-period demand rates for rail transportation. Regulations repealed November 4, 1980.
Section 210 --	Ex Parte No. 327 (Sub-No. 1). The Commission repealed its capital incentive rate regulations. Regulations repealed November 4, 1980.
Section 211 --	Ex Parte No. 390. The Commission established minimum standards for the tariff publication of rates which limit carrier liability to an amount established by written declaration of the shipper or by a written agreement between the shipper and the carrier. Decision served December 22, 1980.
Section 211(d) --	Ex Parte No. 403. The Commission prepared a report which examined the question of whether rail carriers should continue to be subject to the uniform strict liability standard of 49 U.S.C. 11707, and determined they should be.

Section 211(d) -- (continued) The report was submitted to Congress on September 30, 1980.

Section 213 -- Ex Parte No. 400. The Commission modified its procedure for dealing with petitions for exemption regarding financial matters by eliminating the notice and comment procedure except where a potential for significant impact exists or where the impact is not readily ascertainable from the petition. Notice published December 24, 1980.

Ex Parte No. 230 (Sub-No. 5). The Commission exempted rail and truck service provided by rail carriers in connection with trailer on flatcar (TOFC) and container on flatcar (COFC) service from its regulation. Order served February 19, 1981.

Ex Parte No. 230 (Sub-No. 6). The Commission proposed to exempt from regulation truck service provided by railroad affiliated motor carriers and other motor carriers. Notice of proposed rule served February 19, 1981.

Ex Parte No. 346 (Sub-No. 7). The Commission sought comments on the merits of exempting all export coal traffic through all U.S. ports from some or all of its regulations. Notice of proposed rulemaking served September 3, 1981. Comments are under review.

Section 214 -- Ex Parte No. 388. The Commission decided to certify provisionally 40 States to exercise jurisdiction over intrastate railroad rates, but the States were required to file more detailed standards and procedures with the Commission confirming their intent to exercise their jurisdiction in conformance with Federal standards. Decision served April 22, 1981. Thirty-six States have refiled; these submissions are presently under review.

Ex Parte No. 409. The Commission considered a petition (filed by the National Association of Regulatory

Section 214 -- (continued)

Utility Commissioners) requesting rules that would require rail carriers to provide States with informational tariff filings reflecting general and inflation-based rate increases and fuel adjustment surcharges. Final rules were adopted requiring such informational filings in a decision served November 5, 1981.

Section 215 --

Docket No. 37465. The Commission has proposed guidelines to distinguish between sales-related business entertainment expenses and those expenses which in the past would have constituted illegal rebates or discrimination but are now permitted under the provisions of the Staggers Act. Only the former category of expenses can be included in the carriers' cost of service or rate base. Notice of proposed rulemaking served December 24, 1980. A final decision will be issued in the near future.

Section 216 --

Docket No. 37517. The Commission revised its tariff filing regulations to reflect the new statutory time periods (permitting rail carriers to file increased rates or new rates on 20 days' notice and to file reduced rates on 10 days' notice). Notice of proposed rule served December 29, 1980, and became effective on publication in Federal Register.

Ex Parte No. 398. The Commission modified its rules so that the dates by which protests and appeals must be filed reflect the 20- and 10-day rate filing requirements. Decision published December 3, 1980.

Section 217 --

Ex Parte No. 402. The Commission proposed regulations to define the term "reasonably expected costs" for use in the determination of surcharges on certain joint-line traffic. Notice of proposed rulemaking served January 16, 1981. A decision will be issued in the near future.

	Ex Parte No. 389. The Commission developed procedures for requesting rail variable cost and revenue determinations for joint rates subject to surcharge or cancellation. Notice of proposed rulemaking and interim rule requirements issued October 27, 1980, and March 23, 1981. Comments are under review.
Section 218 --	Ex Parte No. 322 (Sub-No. 1). The Commission proposed modifications to its regulations governing the processing of divisions of revenue proceedings in order to implement revised deadlines for these cases established by the Staggers Rail Act. Notice of proposed rulemaking served October 16, 1981. Comments are presently being filed.
Section 219 --	Section 5b Application Nos. 2, 3, and 6. The Commission issued a decision disapproving the proposed collective ratemaking agreements filed by the Western, Eastern, and Southern Railroads. Applicants were directed to file amended agreements with the Commission conforming with Section 219 and the Commission's implementation of it. Decisions served January 14, 1981, March 30, and April 1, 1981.
Section 220 --	Ex Parte No. 346 (Sub-No. 3). The Commission proposed to exempt all rates and charges for rail transportation from the long and short haul and aggregate of intermediates restrictions of 49 U.S.C. 10726(b) and (d). Notice of proposed rulemaking served December 9, 1980.
Section 221 --	Ex Parte No. 392. The Commission proposed modifications to its regulations regarding construction, acquisition, or operation of railroad lines. The Commission also proposed revised regulations to eliminate unnecessary and redundant informational requirements and streamline its application procedures. Notice served August 13, 1981.
Section 228 --	Ex Parte No. 282 (Sub-No. 6). The Commission adopted a general policy statement for rail consolidations. The

Section 228 -- (continued)	policy statement explains the statutory factors the Commission must examine as well as the balancing test employed in determining whether the transaction is in the public interest. Decision served February 2, 1981, modifies prior proposed policy statement.
	Ex Parte No. 282 (Sub-No. 7). The Commission adopted interim rules governing applications for special intermodal authority. This authority would allow a rail carrier or its affiliate to provide motor carrier transportation prior or subsequent to rail transportation where rail service to shippers is impaired. Notice and request for comments served November 18, 1980. Interim rules in effect.
Section 229 --	Docket No. 37622. The Commission issued a decision answering certain interpretative questions concerning the savings provision. Decision served March 20, 1981.
	Ex Parte No. 411. The Commission developed procedures for handling complaints filed under Section 229. Notices served April 28 and June 10, 1981. Management comference held October 29, 1981.
Section 401 --	Ex Parte No. 395. The Commission established procedures for implementing the feeder railroad development program. This program requires railroads to sell certain rail lines under specific circumstances to a financially responsible person who applies for the acquisition of these lines. Decision served July 9, 1981.
Section 402 --	Ex Parte No. 274 (Sub-No. 6). The Commission revised its regulations governing railroad abandonments and discontinuances of service to reflect the provisions of section 402. Decision served September 10, 1981.
Section 709 --	Ex Parte No. 405. The Commission conducted a study to determine whether Alaska Railroad water/rail rates would, if such rates had been entered into after the effective date of the Staggers Act, have violated section 10701a(c)(1) as amended. Notice published January 6, 1981. The study, competed June 1, 1981, concluded that the rates covered cost of service.

APPENDIX III

STAGGERS ACT LITIGATION

We presently have some 39 cases (or sets of related consolidated cases) involving the Staggers Act, covering a variety of substantive areas.

I. Surcharges (Section 217; 49 U.S.C. 10707a)

These cases concern surcharges on joint rates and surcharges on light density lines.

A. Surcharges on Joint Rates

No. 80-6007 (5th Cir.)
(G.C. 4360)

Status: Dismissed by the Court

Conrail applied broad commodity wide surcharges. Family Lines opposed the surcharges and argued that Conrail had not provided cost and revenue data necessary to show which movements could not take the surcharges. The court dismissed the case when Conrail furnished the information.

(2) Jos. Schlitz Brewing Co. v. U.S.C. & I.C.C.
No. 81-1176 (D.C. Cir.)
(G.C. 4398)

Status: Dismissed by the Court

The Commission did not suspend Conrail surcharges, some of which applied to movements with variable cost ratios above 110 percent. When Conrail reduced the surcharges, petitioner moved to dismiss the case.

B. Surcharges on Light Density Lines

(1) City of Cherokee v. U.S.A.
No. 81-1607 (8th Cir.)
(G.C. 4487)

Status: Fully briefed and oral argument presented

ICG applied a surcharge to a line the Commission had authorized ICG to abandon but which the 8th Cir. had held could not be abandoned. Petitioners claim the surcharge constitutes de facto abandonment in conflict with Court's jurisdiction. The Commission argued that the statute clearly permits ICG's surcharge and that the 8th Cir. cannot, in effect, suspend a rate the Commission has refused to suspend.

(2) People of the State of Ill. v. U.S.A.
No. 81-2146 (7th Cir.)
(G.C. 4513)

Status: Commission's motion to dismiss asserting that the case is not reviewable is pending

Petitioners allege that a surcharge amounts to de facto abandonment contrary to the statute. We have argued that the Commission's refusal to suspend the surcharge is unreviewable.

(3) Henderson-Princeton Rail Retention Committee v. I.C.C.
No. 81-3412 (6th Cir.)
(G.C. 4514)

Status: Commission's motion to dismiss on grounds of nonreviewability pending

Petitioners allege surcharge amounts to de facto abandonment. Our argument the same as in (2) above.

(3a) Michigan Packing Corp. v. ICC
No. 81-3412 (6th Cir.)
(G.C. 4503)

Status: Court granted Conrail motions to dismiss on grounds of nonreviewability

(4) Mississippi Public Service Commission v. I.C.C.
No. 81-4043 (5th Cir.)[1]
(G.C. 4382)

Status: 5th Cir. has entered a housekeeping stay of the surcharge's effectiveness; Commission's motion to dismiss pending

The Commission has authorized abandonment and the railroad has applied a surcharge until the abandonment becomes effective.

II. Exemptions (Sec. 213; 49 U.S.C. 10505)

(1) American Trucking Associations v. I.C.C.
No. 81-4046 (5th Cir.)
(G.C. 4386)

Status: Case decided - Commission affirmed in virtually all respects[2]

The Commission exempted from regulation rail and rail-owned truck transportation provided by rail carriers in connection with TOFC/COFC service. Most difficult issue was exempting motor transportation rendered by rail-owned trucks. Court held that "transportation" in Section 213 should be read to include both motor and rail service, and that the Commission's exemption powers under Section 213 are broad. Court also affirmed exemption of ex-ocean traffic.

(2) John W. McGinness, et al. v. I.C.C. & U.S.A.
No. 79-2457 (D.C. Cir.)
(G.C. 4098)

Status: Case decided - affirmed in part and remanded in part

Before the Staggers Act, the Commission adopted rules exempting "designated operators" (small carriers providing service over small segments of track under the 3 R Act) from the provisions of the ICA governing mergers, interlocking directorships, and labor protection. Petitioners argued, among other things, that the Staggers Act expressly prohibits exemption from the labor protection provisions. We argued that the Staggers Act did not apply to these pre-Act rules, and that designated operators are not really common carriers who have to provide protection. Because the court held that the Staggers Act bar of labor protection exemption governs the case and prohibits exemption, it remanded the labor protection portion of the decision. The court affirmed the exemption from the other portions of the Act, however.

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[1] A prior case (No. 81-4043) with the same caption presented the same issue. That case was dismissed at petitioners' request.

[2] The Court reversed the Commission's exemption of the Alaska Railroad because its rates are not set competitively and because it is immune from the antitrust laws.

(3) Patrick Simmons v. I.C.C.
No. 80-2577 (D.C. Cir.)
(G.C. 4365)

Status: ICC motion to remand pending

Here, the Commission adopted rail consolidation procedures, before the Staggers Act, that exempt certain transactions from labor protection. In view of Section 213 (which bars such exemptions) and the McGinness case, the Commission asked the court to remand the case for further Commission consideration.

III. Contract Rates

A. Iowa Power & Light Co. v. I.C.C.
No. 79-1676 (8th Cir.)
(G.C. 4307)

Status: Decided. Commission affirmed.

In this case the Commission held BN coal rates to the level negotiated with the utility. BN argued that the Staggers Act applied (because the case was served on Oct. 1,1980) and that the Commission lacked jurisdiction because the cost ratios were below the 160 percent level needed for Commission jurisdiction under the Staggers Act. We argued that the Staggers Act did not apply because the case was actually decided before Oct. 1, 1980, that the statute should not be applied retroactively, and that Section 208(j) preserves contract rights negotiated prior to the Act, without regard to the Act's jurisdictional limits. The court found the

Act inapplicable, but not for the reasons we urged. Essentially the court found that the utility would suffer manifest injustice if it had to begin again before the courts, especially since it had started its case before the Commission 2 1/2 years ago.

B. Six cases present essentially the same fact pattern. In all of these cases railroads entered into rate agreements with shippers prior to the Staggers Act. The railroads then published rates higher than those in the agreements, and district courts enjoined the effectiveness of the rates. The Commission has taken the position that enforcement of these pre-Act contracts is within the Commission's exclusive jurisdiction.

(1) Metallurg, Inc. v. Burlington Northern, Inc.
No. 81-1478 (8th Cir.)
(G.C. 4402)

Status: Briefed (Commission filed amicus brief)

(2) Cleveland - Cliffs Iron Co. v. Chicago & Northwestern Transportation Co.
No. M81-68 CA(2)(W.D. Mich.)
(G.C. 4443)

Status: Briefed (Commission filed amicus brief)

(2) Burlington Northern v. Nebraska Public Power District
No. 80-1912 (8th Cir.)
(G.C. 4401)

Status: Briefed (Commission filed amicus brief)

(4) Southwestern Elec. Power Co. v. Burlington Northern, Inc.
No. 79-3049 (5th Cir.)
(G.C. 4087)

Status: Briefed and argued. Awaiting decision.

(5) Hannah Mining v. Escanaba & Lake Superior Railroad
No. 80-1681 (6th Cir.)
(G.C. 4296)

Status: Briefed and argued. Commission filed an amicus brief

(6) Hannah Mining v. I.C.C.
No. 81-3413 (6th Cir.)
(G.C. 4515)

Status: Being held in abeyance prior to briefing pending 6th Cir. decision in Cleveland - Cliffs

C. Two similar cases involve the Commission's decision to enforce a pre-Staggers Act contract by holding a railroad to the rate level negotiated with the shipper.

(7) Burlington Northern, Inc. v. U.S.A. & I.C.C.
No. 79-1547 (D.C. Cir.)
(G.C. 3961)

Status: Briefed; awaiting argument

(8) Cleveland Cliffs Iron Co. et al. v. I.C.C.
No. 79-3775 (6th Cir.)

Status: Argued and awaiting decision

D. Two cases involve challenges by water carriers to the Commission's regulation of contract rates

(9) Water Transport Association v. I.C.C.
No. 81-1451 (D.C. Cir.)
(G.C. 4433)

Status: Briefed; awaiting argument

Water carriers assert that Section 707 permits them to challenge rate contracts between shippers and railroads, that the water carriers are entitled to know the full text of such contracts, and that the Commission erred by deciding to govern access to rail rate contracts on a case-by-case basis instead of by rulemaking. We argue that Section 208 plainly permits only shippers or ports-not water carriers-to challenge contract rates, and that Section 707 does not override the plain language of Section 208. We also argue that the Staggers Act precludes unrestricted public access to rate contracts, and that the Commission has the discretion to process requests for contract information on a case-by-case basis until it promulgates rules.

(10) Sea-Land Service, Inc. v. I.C.C.
No. 80-1544 (D.C. Cir.)
(G.C. 4219)

Status: Briefed and argued

The Alaska Railroad entered into contract rates with two shippers and a water carrier. Sea-Land petitioned for suspension of the contract rates, but the Commission did not suspend them. Sea-Land then sought judicial review arguing that pre-Staggers Act contracts were unlawful. We argued that the Commission's refusal to suspend the rates is not reviewable (Seaboard Allied), that contracts were permitted prior to the Staggers Act, and that the Staggers Act did not bar contracts among shippers, railroads, and water carriers.

IV. Maximum Rate Regulation

A. Market Dominance

(1) Western Coal Traffic League v. U.S.A.
No. 81-4257 (5th Cir.)
(G.C. 4505)

Status: Brief not yet filed

Numerous parties are challenging the Commission's market dominance guidelines, arguing primarily that the Commission erred by reversing the position it took after the 4 R Act and allowing evidence of product and geographic competition to be submitted by railroads.

(2) Chlorine Institute v. I.C.C.
No. 80-2588 (D.C. Cir.)
(G.C. 4357)

Status: Voluntarily dismissed by petitioner

B. Recyclables

National Association of Recycling Industries v. I.C.C.
No. 81-1051 (D.C. Cir.)
(G.C. 4369)

Status: Commission issued order on October 13th following remand from court. Commission has ordered reductions in rates on nonferrous products to the 146% variable cost level, has provided method for calculating the reductions, and has ordered refunds, with interest.

C. Ratemaking

(1) Denver & Rio Grande Western R.R. v. U.S.A.
No. 81-1135 (10th Cir.)
(G.C. 4389)

Status: Remanded at Commission's request for further consideration of cost issues

This case involves rates on coal, and one key issue is whether the Commission must consider the revenue need evidence outlined in 49 U.S.C. 10707a(e)(2)(C).

(2) Burlington Northern v. U.S.A.
No. 81-1706 (D.C. Cir.)
(G.C. 4496)

Status: Petitioners' briefs filed

This case concerns coal rates to Redfield, Ark. The Commission applied a version of the ton/ton-mile analysis being developed in Ex Parte 347 to this case.

V. Savings Provision

(1) Baltimore Gas & Electric Co. v. I.C.C.
No. 81-1324 (D.C. Cir.)
(G.C. 4410)

Status: Briefed, awaiting argument

These cases involve an interpretation of the 180-day complaint "window" created by Section 229. Shippers can challenge at any time rates under which "the volume of traffic moved during the 12-month period immediately preceding the effective date of this Act did not exceed 500 net tons..." The Commission interpreted this language to mean that all traffic for all shippers must be less than 500 tons. Shippers claim that the 500 tons relates to each shipper's traffic and not to the aggregate.

VI. State Regulation of Rail Rates

A. Constitutionality

(1) Texas v. United States
No. A-80-CA-487 (W.D. Tex.)
(G.C. 4353)

Status: Cross motions for summary judgment pending

(2) Montana v. United States
No. 81-29-GF-(D. Mont.)
(G.C. 4415)

Status: Motion to hold in abeyance pending outcome of Texas case have not yet been acted on.

These proceedings involve challenges to the constitutionality of Section 214. That Section limits state regulation of intrastate rail rate matters by requiring any state desiring to exercise such jurisdiction to obtain Commission certification, and, if it elects to seek certification, to regulate only in accordance with the federal scheme.

In the Texas case, plaintiffs contend that the statute (1) is in excess of the Commerce Clause and violative of the Tenth Amendment by coercing states to enforce federal policy, and (2) is violative of the due process clause of the Fifth Amendment by permitting railroads to extract monopoly profits from captive intrastate shippers. In response, the government (the Department of Justice has primary litigating authority in these cases) contends that (1) Congress found that state regulation of intrastate rail rates has burdened interstate commerce and Section 214 is reasonably adapted to eliminating that burden, and Congress' power to regulate intrastate rail rates is not limited by the Tenth Amendment; and (2) the Staggers Rail does not violate the Fifth Amendment, and even if plaintiffs showed that the Act permitted railroads to enjoy monopoly profits no taking of property would occur.

In the Montana case, plaintiffs raise the two arguments made in the Texas case, and further allege that the Staggers Act does not accord a meaningful opportunity to challenge the reasonableness of rates in effect upon passage of the legislation, and therefore deprives shippers of equal protection and due process, and permits a taking of private property without just compensation.

B. Scope of State Jurisdiction

(3) Indianapolis Power & Light Co. v. I.C.C. & U.S.A.
No. 81-1916
(G.C. 4486)

Status: Petitioners' briefs filed

This case presents the issue of whether Section 214 bars state regulatory bodies from ruling on intrastate general increases that were (a) filed, or (b) discussed by a rate bureau before passage of the Staggers Act.

(4) City of Colorado Springs v. I.C.C.
No. 81-1955 (10th Cir.)
(G.C. 4553)

Status: Petitioners' brief due November 1981

Section 214 removed all state jurisdiction over general increases. The issue in this case is whether Section 214 removes state jurisdiction over an increase rejected by a state prior to the Staggers Act, but which was still subject to ICC review at the time the Staggers Act was enacted. Rather then determining whether the state rejection discriminated against interstate commerce, as required by the old law, the ICC found that the Staggers Act removed all state jurisdiction, and that the railroads could therefore apply the general increase to Colorado intrastate traffic. Petitioner argues that the Commission has impermissibly given Section 214 retroactive effect.

VII. Abandonment

Chicago & Northwestern Transportation Co. v. U.S.A.
No. 81-2195 (7th Cir.)
(G.C. 4528)

Status: Petitioners' briefs filed

In this case the Commission authorized abandonment of a CNW line. Shippers offered to buy the line at net liquidation value, but the railroad demanded going concern value. Pursuant to Section 402, the Commission set the price at essentially net liquidation value. CNW has appealed, raising constitutional claims as well as contentions that the Commission did not comply with Section 402.

VIII. Revenue Adequacy

(1) Bessemer and Lake Erie Railroad Co. v. I.C.C.
No. 81-1492 (3rd Cir.)
(G.C. 4419)

Status: Awaiting petitioners' brief

This case involves petitions for review of the Commission's regulations implementing the revenue adequacy provisions (Section 205) of the Staggers Act.

(2) Western Coal Traffic League v. U.S.A.
No. 81-1354 (D.C. Cir.)
(G.C. 4416)

Status: Dismissed (Petition for rehearing pending). This case is seeking review of revenue adequacy rules, but was dismissed because the ICA (in the court's view) requires parties to file petitions for review no earlier than the day after a Commission decision is served.)

IX. Rate Bureaus

Chicago & Northwestern Transp. Co. v. U.S.A.
No. 80-2113 (7th Cir.)
(G.C. 4274)

Status: Held in abeyance pending Commission approval of particular agreements

This case involves the Commission's implementation of the rate bureau provisions (Section 219) of the Act

X. Labor Protection

Railway Labor Executives' Ass'n v. William M. Gibbons
No. 80-415 (U.S. Supreme Court)

Status: Government and Labor's brief filed. Government reply brief due 11/81. Argument set for 11/81

This case concerns the constitutionality of the labor protection provisions of the Rock Island Act, as amended by the Staggers Act. The primary issue is whether the legislation's provisions for up to $75 million in labor protection payments from the estate constitutes an unconstitutional taking of the estate's property. The government argues that the legislation's provisions do not constitue a taking.

XI. Miscellaneous Areas

A. Minimum Rate Regulation

Water Transport Ass'n v. I.C.C.
No. 81-1744 (D.C. Cir.)
(G.C. 4498)

Status: No briefs filed yet

This case involves a challenge to the regulations promulgated in Ex Parte No. 355 to implement Section 201's minimum rate provisions (49 U.S.C. 10701a(c). The water carriers challenging the rules assert that Section 707 of the Act preserves certain water carrier rights with respect to minimum railroad rates and that the Commission failed to consider Section 707 when it developed the minimum rate rules.

B. Joint Rate Cancellations

Toledo, Peoria & Western R. Co. v. U.S.A.
No. 81-2193 (7th Cir.)
(G.C. 4522)

Status: Cancellations not stayed by court ICC motion to dismiss as an unreviewable suspension action pending.

In this case ConRail canceled 7 1/2 percent of its interterritorial joint rates under Section 217 of the Act (49 U.S.C. 10705a(c)). The Commission did not suspend the cancellations but instituted an investigation.

C. Railroad Cost Recovery Index

Western Coal Traffic League v. U.S.A.
No. 81-1437 (D.C. Cir.)
(C.G. 4416)

Status: All briefs will be filed by 11/1/81

This case concerns challenges to the cost recovery index promulgated by the Commission to implement Section 203 of the Act. Section 203 permits railroads to make periodic unchallengeable rate increases to keep abreast of inflation. To measure inflation's effect, the Commission adopted a modified version of the AAR's input price index, which measures the prices of the inputs railroads purchase, without an adjustment for productivity. Shippers claim that Section 203 mandates an output cost index that takes account of productivity changes, and that the Commission did not adequately explain why it did not adopt such an index. The case essentially turns upon the meaning of the following statutory language in 49 U.S.C. 10707a(2)(B):

> "...which index shall be compiled or verified by the Commission, with appropriate adjustments to reflect the changing composition of railroad costs, including the quality and mix of material and labor..."

Shippers claim this language mandates an output cost index, while the Commission says it leaves the matter open and permits an input price index.

D. Railroad Consolidation

Illinois v. United States
No. 81-2194 (7th Cir.)
(G.C. 4533)

Status: Awaiting petitioner's brief

The Commission approved the purchase by N&W of a terminal railroad under new 49 U.S.C. 11344(d), which specifies that in consolidation not involving two Class I railroads the Commission need only look at competitive considerations and not the whole panoply of public interest factors. Labor interest will argue that the Commission must examine all the public interest factors under 11344(d).

E. Alaska Rate Study

Totem Ocean Trailer Express v. I.C.C.
No. 81-1863 (D.C. Cir.)
(G.C. 4532)

Status: ICC motion to dismiss pending

Section 709 directs the Commission to study certain Alaska Railroad rates to determine whether those rates, if they had been established after the Staggers Act, would have violated the Act's minimum rate provisions. A competitor of the Alaska Railroad has challenged the results of the Commission study. We have moved to dismiss the appeal on the ground that the study is not judicially reviewable.

APPENDIX IV

PROBLEM AREAS

Although in general we believe the Staggers Act is well structured, certain provisions have presented problems as we attempt to interpret the law. We will briefly mention some of the problems, and if the Congress desires, Commission staff will submit draft language in an attempt to rectify these problems. Among these problems are:

(1) In amending section 11344, the Staggers Act limited the provisions of subsection (b) to transactions which involve the merger or control of at least two Class I railroads and added a fifth factor for our consideration in such cases.[1] No change was made in subsection (c). However, a new subsection (d) was added to govern merger or control proceedings not involving two Class I railroads. In those cases, the Commission is directed to approve the application unless it finds that there is likely to be a substantial lessening of competition and the anticompetitive effects outweigh the public interest. Thus, analysis of the standards applicable in a section 11344 transaction is complicated by the interplay between amended subsections (b) and (d) and unamended subsection (c).

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[1] The Commission was instructed to consider "...(5) whether the proposed transaction would have an adverse effect on competition among all rail carriers in the affected region."

Looking at section 11344 in its entirety, it appears that the "public interest" sentence of subsection (c) sets out the basic requirement for all applications coming within its scope. To determine under the amended statute whether a transaction between two or more Class I railroads is consistent with the public interest, the Commission can and will continue to consider the criteria specified in subsection (b), as well as any other issues deemed relevant to the public interest. See, Ex Parte No. 282 (Sub-No. 6), Railroad Consolidation Procedures, Merger Policy Statement.

However, it appears that under the amended statute the only way a transaction between two carriers other than two or more Class I railroads could be contrary to the public interest is if it is anticompetitive, and the anticompetitive effects of that transaction outweigh the public interest in meeting significant transportation needs. See Norfolk & Western Ry. Co. Illinois Term. R. Co. (Illinois Case), 363 I.C.C. 882, 891 (1981).

It is more difficult to reconcile the third sentence of subsection (c)--permitting an increase in fixed charges "only" if the Commission finds the increase in the public interest--with the mandate of subsection (d) that an application "shall" be approved if it is not anticompetitive. This sentence in subsection (c) either has to be limited in application only to Class I railroad merger and control proceedings and to transactions with an anticompetitive effect, or construed as an exception to the mandatory language in subsection (d) that all applications be approved absent an anticompetitive effect. Legislative clarification would be useful.[2]

Motor Carrier Consolidation Criteria

Under the Staggers Act amendments, motor carrier consolidations are apparently to be judged under the anticompetitive criteria found in subsection (d). This interpretation, however, conflicts with the apparent intent of both the Staggers Act and the Motor Carrier Act of 1980. The legislative history of the Staggers Act indicates that it was aimed exclusively at rail transportation matters. Motor carriers are not even mentioned in the conference report concerning the amendments to section 11344. See H.R. Rept. No. 96-1430, 9th Cong., 2nd. Sess. at 120.

Furthermore, the Staggers Act was enacted within a few months after passage of the Motor Carrier Act. The Motor Carrier Act was the culmination of 18 months of study of the motor carrier industry. It was a comprehensive piece of legislation aimed at reducing federal regulation and modernizing the existing regulatory system for motor carriers. In enacting that legislation, Congress altered several statutory provisions affecting motor carrier consolidations.[3] Most significantly, however, it left section 11344 unchanged.

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[2] In the Illinois Terminal Case, the Commission noted that it may be required to make a determination concerning the assumption of fixed charges. In that proceeding, however, the Commission was able to avoid this issue since the same determination was required to be made in connection with a related securities application under section 11301.

The Commission addressed this problem in Ex Parte No. 55 (Sub-No. 53), Motor Carrier Consolidation Procedures, General Policy Statement. In this statement, the Commission determined that it would be unreasonable to assume that Congress intended to change the standards for regulation of motor carrier consolidations in the absence of supporting legislative history. It announced that it would continue to apply the statutory criteria existing prior to the Staggers Act [i.e., the consideration of the four factors listed in former section 11344(b)] in deciding motor carrier consolidation applications. The Commission announced that it would seek Congressional clarification of this matter.

(2) The Commission does not make rail contracts available to the public since section 10713(b) requires that contracts be treated as confidential, and that only essential, non-confidential information be available to the public. However, sections 10713(2)(A) and (B) give certain shippers and ports the right to challenge contracts as

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3/ Section 18 of the Motor Carrier Act raised the monetary limits of the exemptions from Commission jurisdiction under 49 U.S.C. 11343(d)(1).

Section 27 added a new statutory provision, 49 U.S.C. 11345a, intended to expedite disposition of motor consolidation proceedings.

discriminatory. Many shippers and ports have argued that if they are to have a meaningful right to challenge contracts on such grounds, they need more than the non-confidential information now available to them. On the other hand, parties have been able to obtain additional information under the Freedom of Information Act. Is this consistent with Congressional intent or should this information be excluded under FOIA?

An amendment to Section 10713 may be necessary to resolve the conflicting statutory objectives.

(3) The cost index required by 49 U.S.C. 10707a(a)(2)(B) is subject to doubt, essentially over whether the index must reflect productivity. This matter is presently the subject of litigation in the D.C. Circuit.

(4) There is some ambiguity concerning the relationship between the rights granted water carriers in Section 707 and the rate freedom granted railroads by Section 201 and 208. Water carriers assert that they can challenge contract rates and that minimum rate regulation must take special account of water carrier rates. Both issues are the subject of pending litigation.

(5) The light density surcharge cases present a possible conflict between the abandonment provisions and the surcharge provisions. Some parties have alleged, in essence, that the surcharge provisions permit evasion of abandonment procedures, and permit railroads to make it

impossible for shippers to oppose abandonments, because the carriers can cause all traffic to dry up. While the Commission has argued that there is no conflict, this question is at issue in a number of court cases. Also, in the surcharge area there is no provision for protest by public bodies such as State Regulatory Commissions. If this was an oversight, they could be given the same rights as ports.

(6) Another possible problem is raised by 49 U.S.C. §11501. If state rate procedures certified by the Commission provide for five (or eight) months to investigate a rate, a conflict may arise with section 11501(d), because a railroad can ask for Commission action on the rate after four months. Furthermore, once a railroad comes to the Commission under section 11501(d), it is unclear how much time the Commission has to process the rate.

(7) 49 U.S.C. 11501(c) requires the Commission to take final action within 30 days on a petition of a rail carrier challenging the lawfulness of an intrastate rate, classification, rule or practice. This deadline is extremely difficult to meet. The last sentence of subsection (c), however, further complicates the problem in that it requires the Commission to "determine and authorize the appropriate rate, classification, rule or practice" if the standards and procedures applied were not in accordance with Federal standards. Considering the time limits

involved, it would appear preferable to permit the Commission "to take appropriate action." This would permit reversal and removal to the State where appropriate.

(8) Section 10709(d)(3) provides that variable costs shall be calculated using Rail Form A (or an alternative methodology adopted by the Commission in lieu thereof), with adjustments specified by the Commission. A controversy has arisen as to whether the underlined language refers to adjustments by the Commission in a particular case or whether the statutory language refers to uniform adjustments adopted by the Commission for use in all proceedings.

(9) Section 10705a specifies the circumstances under which a surcharge may be published, the showing that must be made for cancelling the application of a surcharge, and the requirements for cancellation of the application of a joint rate to a through route. Pre-existing section 10705(e) also relates to cancellation of through routes and joint rates. Questions have arisen as to the interrelationship of the two sections: is the surcharge provision intended to limit the relief otherwise available under section 10705(e)? Similarly, an ambiguity exists between the provisions of Section 10705 and 10705a and their effect on the railroad's burden of proof. Clarification would be helpful.

(10) The so-called "40 percent" limitations in the contract provision of section 208 have caused difficulties for the paper industry. This problem could be resolved by

deleting the phrase "(including forest products and paper)" in 49 U.S.C. § 10713(k)(1) and substituting the following: "(including forest products generally but, as to subparagraph (k)(1) only, not including paper, wood pulp, wood chips or pulpwood)."

(11) Although not a problem created by the Staggers Act, we would like to bring to your attention a provision of 49 United States Code which creates an inequity and increases Federal costs. Under 49 U.S.C. 10329(c)(1), the Commission is required to serve personally on a railroad's Washington Agent any notice of a Commission decision to which the railroad is a party. This appears inequitable to other modes of transportation which receive their notices by mail, which takes longer. It also involves costs (approximately $40,000 annually) to the Commission because a contract messenger service is used to deliver such decisions.

APPENDIX V

List of Surcharge Tariffs Filed after October 14, 1980*:

Consolidated Rail Corporation

ICC CR 9528	Effective 2/14/81
ICC CR 9529	Effective 12/27/80
ICC CR 99529A	Effective 1/28/81
ICC CR 9531	Effective 3/28/81
ICC CR 9531a	Effective 6/13/81
ICC CR 9532	Effective 7/14/81

Long Island Railroad Company

ICC LI 9074	Effective 10/27/81

The Illinois Central Gulf Railroad Company

ICC ICG 8006	Effective 2/11/81

The Wisconsin and Southern Railroad Company

ICC WSOR 9001	Effective 1/30/81
ICC WSOR 9001A	Effective 2/9/81

The Delaware and Hudson Railroad Company

ICC DH 9500	Effective 2/1/81
ICC DH 9501	Effective 2/1/81
ICC DH 95002	Effective 2/1/81
ICC DH 95003	Effective 2/1/81
ICC DH 95004	Effective 2/1/81
ICC DN 95005	Effective 2/1/81

New York, Susquehanna and Western Railroad Company

ICC NYSW 9600	Effective 3/16/81

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*Many of the tariffs contain more than 1 surcharge item.

Chicago, Madison and Northern Railway Company

ICC CMNR 9002	Effective 2/21/81

Boston and Maine Corporation, Robert W. Meserve and Benjamin H. Lacy, Trustees.

ICC BM 9650	Effective 3/31/81
ICC BM 9650A	Effective 5/30/81
ICC BM 9650B	Effective 7/7/81

Central Vermont Railway, Inc.

ICC CV 9801	Effective 1/26/81

Escanaba and Lake Superior Railroad Company

ICC ELS 9002	Effective 4/18/81 cancelled 4/18/81

Laona & Northern Railway Company

ICC LNO 9000	Effective 5/28/81

Mississippi Railway

ICC MISS 901	Effective 5/25/81

Central Wisconsin Railway Company

ICC CWRC 9000	Effective 6/25/81

Rahway Valley Company (Rahway Valley Company, Lessee)

ICC RB 9000	Effective 6/27/81

Seaboard Coast Line Railroad Company

ICC SCL 9200 Effective 6/30/81

Burlington Northern Inc.

ICC BN 9014 Effective 8/3/81

Chicago, West Pullman & Southern Railroad Company

ICC CWP 9001 Effective 12/18/80

Norfolk and Western Railway Company

ICC NW 9500 Effective 4/19/80

Ann Arbor Railroad System

ICC AA 9000 Effective 11/14/81

Indiana and Ohio Railroad, Inc.

ICC INOH 9001 Effective 7/10/81

Indiana Interstate Railway Company

ICC IIHR 9003 Effective 8/9/81

Iowa Northern Railroad Company

ICC IANR 901 Effective 11/2/81

Missouri Pacific Railroad Company

IFF MP 9218 Effective 3/21/81

Grand Trunk Western Railroad Company

ICC GTW 9028 Effective 11/11/81

Grand Trunk Western Railroad Company

ICC GTW 9029 Effective 11/11/81

Grand Trunk Western Railroad Company

ICC GTW 9030 Effective 11/12/81